



TOWN OF SMYRNA STORM WATER ADVISORY COMMITTEE
AGENDA
JULY 15, 2024 @ 5:00 PM
COUNCIL CHAMBERS, TOWN HALL

- I. **CALL TO ORDER**
- II. **PUBLIC COMMENT**
"The Town's Public Comment Period shall be reserved for those citizens that have signed up to address a Board or Committee, at least twenty-four (24) hours in advance of the meeting, pursuant to the Town's Public Comment Policy. Speakers are limited to three (3) minutes. Additional comments may be submitted in writing."
- III. **REVIEW AND APPROVE MINUTES FOR APRIL 15, 2024 MEETING OF STORM WATER ADVISORY COMMITTEE (SWAC)**
- IV. **OLD BUSINESS**
 - A. None this quarter
- V. **NEW BUSINESS**
 - A. **Consent / Correction Agenda**
 1. *Vacant / Inactive Account List (1/1/24-3/31/24)*
 - B. **Adjustment Applications**
None this quarter
 - C. **Credit Applications**
None this quarter
- VI. **REPORTS OF OFFICERS, COMMITTEES, OR STAFF**
 - A. **Discuss Storm Water Utility inquiries to date**
 - B. **Presentation of Quarterly Report**
 - C. **Review and Approve for 2024 MS4 Permit**
 - I. **Revised Storm Water Management Ordinance**
 - II. **Revised Stormwater Management Plan**
 - III. **Revised Enforcement Response Program**
 - IV. **Revised Public Information and Education Program**
 - V. **Revised Water Quality Buffer Zone Policy**
 - VI. **Adopt Murfreesboro Stormwater Control Manual**
 - VII. **Revoke adoption of Town of Smyrna Dry Detention Basin Policy and Nashville-Davidson Stormwater Management Manuals**
 - D. **Miscellaneous**
- VII. **ADJOURNMENT**

Town of Smyrna
Storm Water Management Program
Progress Report to the
Storm Water Advisory Committee
July 15th, 2024 at 5:00 PM
Smyrna Town Hall / Council Chambers

- I. Discuss the following Storm Water Management (SWM) Program achievements made from: April 1 through June 30, 2024.
- A. 231 certificates of occupancy issued this quarter were assessed for the corresponding SWU fee then reported monthly to CUD and the Town's Public Utilities Department. In addition, all SWU fee delinquent accounts were also tracked and reported to Utilities.
 - B. Mr. Rose reviewed all grading permits, in tandem with sediment control reviews by the Stormwater Coordinator, and required the submission of as-built drawings for each and every project having its own means of detention as well as all applicable water quantity concerns.
 - C. Received no citizen inquiry about the Storm Water Utility (SWU) user fee.
 - D. The Stormwater Coordinator wrote this quarterly Progress Report. Staff also completed writing the quarterly report. This satisfies an MS4 permit requirement.
 - E. Reviewed 29 newly submitted sets of grading plans for eventual construction projects, during three monthly staff plan review meetings then created project files once each was Planning Commission-approved. This satisfies a MS4 permit requirement.
 - F. Began contacting developers soon after their projects were Planning Commission-approved to encourage them to pass the grading permit procedures (mailed with their Planning Department notice) on to their project manager.
 - G. Corresponded with developers and contractors about several imminent projects concerning grading permit issues. This satisfies a MS4 permit requirement.
 - H. Reviewed, commented, signed, and dated grading plans for 18 sets of newly Planning Commission-approved construction plans in preparation for grading permit issuance. This satisfies a MS4 permit requirement.
 - I. Completed sediment control measure inspections at 14 construction sites. This satisfies a MS4 permit requirement.
 - J. Facilitated grading permit pre-construction meetings for 10 new construction projects once they met all requirements, which are being electronically tracked on the Progress Table. This satisfies a MS4 permit requirement.
 - K. Issued grading permits for 10 new construction projects. This brings the annual cumulative total to 14.
 - L. Investigated 1 Illicit Discharge Detection and Elimination (IDDE) issue.
 - M. Held 16th annual Boat Day event, serving 476 attendees.
 - N. Hired two summer interns for GIS field work collecting stormwater data on old unknown Stormwater infrastructure.
 - O. Revised Town Stormwater documents to satisfy requirements of newest MS4 NPDES permit.

No.	Project Name (Imperv. Surf. Area in sf) 1 ERU, equivalent residential unit = 3,543sf	ERU Equivalent —project sf 3,543(sf/ERU)	Development Type	Monthly SWU Revenue (\$) (ERU * \$3.47)	Annual SWU Revenue (\$)
1	Still House 51,593 sf ISA	14.56	Commercial	50.53	606.36
2	Champy's Chicken 64,557 sf ISA	18.22	Commercial	63.23	758.76
3	Southpark Building 7 - Sabertooth TI 571,663 sf ISA	161.35	Commercial	559.88	6718.68
4	The Vintage - Building C 118,053 sf ISA	33.32	Commercial	65.89	790.68
5	Six Cedars Business Park - Building J 36,348 sf ISA	10.26	Commercial	35.60	427.20
6	Six Cedars Business Park - Building I 31,178 sf ISA	8.80	Commercial	30.52	366.24
7	Courtyard by Marriot Hotel 120,604.95 sf ISA	34.04	Commercial	118.12	1,417.44
8	Florence Road Storage 2 108,516 sf ISA	30.63	Commercial	106.28	1,275.36
			Total	1,030.05	12,360.60

Monthly Total For Year – 1,694.62 Annual Total For Year – 20,335.44 (\$3.47/ERU, Equivalent Residential Unit)

- P. Patrick Owen, Environmental Tech/Sediment Control Inspector started his employment with the Town Of Smyrna in January of 2024. His impressive background combines education in Geology, experience on construction sites, and a strong command of the computer programs used by the Town of Smyrna. Patrick easily got a handle on the job duties and has been performing exceptionally well since being hired.
- i. Organized and tracked monthly inspection calendar for all construction sites.
 - ii. Conducted semi-weekly construction inspections and electronically recorded them, and worked with supervisors, developers, builders, and engineers during 374 construction site inspections.
 - iii. Completed quarterly review of 99 known outdoor grease receptacles in Town of Smyrna
 1. 5 grease receptacles in violation (Letter of Warning issued to all)
 - a. Thai Phooket and Asia Market: 13946 Old Nashville Highway
 - b. Two Brothers Pizza and Restaurant 291 Sam Ridley Parkway
 - c. Fat Mo's Burgers: 298 Sam Ridley Parkway
 - d. El Pueblo Mexican Restaurant: 210 Country Village Drive
 - e. All Restaurants at 701 President Place (Salvos, Sullivans, and Tokyo)
 2. All violating locations received a Letter of Warning with the exception of 701 President Place; this location received a Notice of Violation (NOV) due to discharge of grease into the neighboring detention pond. The nature of the discharge at 701 President Place was such that a single offender could not be identified. The NOV was sent to the building owner(s).
 - iv. Continued to work with business and property owners, et al to educate and enforce detention pond corrections.
 - v. Number of construction lot inspections completed:
 1. 183 Initial Erosion Inspections
 2. 209 Sidewalk and Final Grade Inspections (19 of which failed Sidewalk inspections)
 - vi. Continued to work with the Public Works Director on several ongoing construction projects.
 - vii. Number of Letters of Warning/ NOV / Stop Work Orders Issued:
 1. 4 Letters of Warning
 - a. Thai Phooket and Asia Market, Two Brothers Pizza and Restaurant, Fat Mo's Burger, El Pueblo, Spring branch Townhomes, Patterson Property
 2. 4 Stop Work Orders
 - a. Spring branch Townhomes, The Oaks Lot 53, Jackson St and 3rd St, Seven Oaks Lot 375
- Q. The last SWAC meeting was held during April, with six of the seven members attending.
- R. Cris Good, our multimedia expert, entered into the program's website the following documents; Public Information and Education (PIE), Enforcement Response Plan (ERP), updated tracking numbers for several years of stream cleanups and Adopt-A-Stream events, Boat Day field activity reports, and the SWAC Historical Summary. The site looks great!
- S. Fortunately for Smyrna there are several 'active' citizen groups, including businesses and schools that had five (5) either Adopt-A-Roadway or Adopt-A-Highway events this quarter, using thirty-three (43) volunteers. These efforts brought their annual total events to eleven (11) events and produced 29 bags, thus an annual total of 76 bags of litter that will not end up in our streams from the Adopt-A-Roadway and Adopt-A-Highway programs.
- T. The Public Works Staff handled nine (9) citizen inquiries regarding storm water drainage issues.

TITLE 14

ZONING AND LAND USE CONTROL

CHAPTER

1. ZONING ORDINANCE.
2. PLANNING DEPARTMENT.
3. PLANNING COMMISSION.
4. SIGN ORDINANCE.
5. STORM WATER ADVISORY COMMITTEE.
6. STORM WATER MANAGEMENT ORDINANCE.
7. DEVELOPMENT AGREEMENT.

CHAPTER 6

STORM WATER MANAGEMENT ORDINANCE¹

SECTION

- 14-601. General provisions.
- 14-602. Definitions.
- 14-603. Grading Permits.
- 14-604. Stormwater system design: Construction and Permanent stormwater management.
- 14-605. Permanent stormwater management: operation, maintenance, and inspection.
- 14-606. Illicit discharges.
- 14-607. Enforcement.
- 14-608. Penalties.
- 14-609. Appeals.
- 14-610. Amendments.
- 14-611. Right of Entry and Inspection.

14-601. General provisions. This ordinance shall be known as the "Stormwater Management Ordinance" for the Town of Smyrna, Tennessee (Town).

(1) Introduction.

(a) This ordinance is intended to manage stormwater runoff from new development and redevelopment projects to help maintain or

¹Municipal code reference

Stormwater advisory committee: title 14, chapter 5.

improve water quality, water quantity and the effects of the quality of life and character for Town of Smyrna, Tennessee. This ordinance is intended to help eliminate soil erosion and/or sediment in stream channels that alter the integrity and profile of the stream regime, pollutes water, overloads existing drainage facilities with stormwater and sediment, undermines floodplain management in downstream communities, reduces groundwater recharge, harms or possibly eliminating, natural fauna and flora, and threatens public health and safety. More specifically, surface water runoff can carry pollutants, including the leading pollutant, sediment, into receiving waters. The potential impacts of these pollutants and the accompanying higher velocities and greater volumes include:

(i) Changing natural ecosystems through sediment and pollutant deposits as well as erosion of stream banks that affect the quantity and quality of water flowing, the destruction of habitats, the burying of food sources, and the loss of plant and animal life;

(ii) Posing significant health risks through increased bacteria;

(iii) Accelerating algal growth to the extent of contamination of receiving waters by adding excessive nutrient loads;

(iv) Increasing metal deposits and total suspended solids, thus creating adverse toxicity for aquatic life;

(v) Reducing oxygen levels because of oil, grease, and organic matter;

(vi) Affecting animal and plant life adversely, due to changing temperatures, thus decreasing dissolved oxygen levels of receiving waters.

(b) Uncontrolled stormwater can increase the incidence of flooding and the level of floods which occur, altering the integrity and profile of stream regime, endangering roads, public and private property, and human life. Altered land surfaces can change runoff rate and volume as seen in the following:

(i) Erosion and slumping of stream banks, undercutting roots, blockage and diversion of stream flow directions by fallen trees;

(ii) Increased erosion rates; and

(iii) Uniform and shallow streambeds, providing less varied aquatic habitats.

(c) The adverse water quality and quantity consequences described above may result in substantial economic and/or human losses.

The potential losses include, but are not limited to, increased wastewater and drinking water treatment costs, diminished property values, loss of recreational canoeing and kayaking, increased flood damages and insurance rates, increased stream bank remediation as well as state and federal fines associated with water quality violations. Many future problems can be avoided through proper stormwater management, whereby a comprehensive and reasonable program of regulations is fundamental to the public health, safety, and welfare and to the protection of the citizenry and environment.

(2) Purpose. It is the purpose of this chapter to:

(a) Protect, maintain, and enhance the environment of the Town and the public health, safety, and the general welfare of the citizens of the Town, by controlling discharges of pollutants to the Town's stormwater system and to maintain and improve the quality of the receiving waters into which the stormwater outfalls flow, including, without limitation, lakes, rivers, streams, ponds, wetlands, and groundwater of the Town;

(b) Enable the Town to comply with the National Pollutant Discharge Elimination System permit (NPDES) and applicable regulations, 40 CFR Section 122.26 for stormwater discharges; and

(c) Allow the Town of Smyrna to exercise the powers granted in Tennessee Code Annotated, § 68-221-1105, which provides that, among other powers municipalities have with respect to stormwater facilities, is the power by ordinance or resolution to:

(i) Exercise general regulation over the planning, location, construction, and operation and maintenance of storm water facilities in the Town, whether or not owned and operated by the Town;

(ii) Adopt any rules and regulations deemed necessary to accomplish the purposes of this statute, including the adoption of a system of fees for services and permits;

(iii) Establish standards to regulate the quantity of stormwater discharged and to regulate stormwater contaminants as may be necessary to protect water quality;

(iv) Review and approve plans and plats for stormwater management in proposed subdivisions or commercial developments;

(v) Issue permits for stormwater discharges, or for the construction, alteration, extension, or repair of stormwater facilities;

(vi) Suspend or revoke permits when it is determined that the permittee has violated any applicable ordinance, resolution, or condition of the permit;

(vii) Regulate and prohibit discharges into stormwater facilities of sanitary, industrial, or commercial sewage or waters that have otherwise been contaminated; and

(viii) Expend funds to remediate or mitigate the detrimental effects of contaminated land or other sources of stormwater contamination, whether public or private.

(3) Administering entity. The Town's Stormwater Management coordinator or designee shall administer the provisions of this chapter.

(4) Fees. In order to fund the costs of stormwater management and of administering the provisions of this ordinance, each applicant for land disturbance permit, at the time of submitting such application therefore, shall pay a fee in the amount established by a fee schedule adopted as a part of the budget ordinance. The Town Council of the Town of Smyrna specifically reserves the right to amend this ordinance from time to time to change the amounts and/or calculation of such fees and/or to implement a different system of fees and charges to fund the costs of stormwater management and of administering the provisions of this ordinance. Notwithstanding anything herein to the contrary, the fees established by this subsection shall not become effective until sixty (60) days following the effective date of Ord. #05-07. (Ord. #04-48, Jan. 2005, as amended by Ord #05-07, March 2005, and Ord. #05-19, May 2005)

(5) Jurisdiction. The stormwater management ordinance shall govern all properties within the corporate limits of the Town of Smyrna. The intended purpose of this ordinance is to safeguard property and public welfare by regulating stormwater drainage and requiring temporary and permanent provisions for its control. It should be used as a planning and engineering implement to facilitate the necessary control of stormwater. (Ord. #04-48, Jan. 2005)

(6) Authority of departments. The Town Manager may provide authority in part or whole to various departments for the implementation of activities pursuant to this Title. This authority may include but is not limited to plan review, incentives negotiation, plan approval and Stormwater facilities Maintenance. The Public Works Director or Town Engineer shall have the authority of administration and enforcement of the provisions established pursuant to this Title, including, but not limited to, the issuance of civil penalties.

(0) Right-of-entry

(a) Designated Town staff shall have right of entry on or upon the property of any person subject to this Title and any permit/document

issued hereunder. The Town staff shall be provided ready easy access to all parts of the premises for the purposes of inspection, monitoring, sampling, inventory, records examination and copying, and the performance of any duties necessary to determine/document compliance with this Title.

(b) Where a property, site or facility has security measures in force which require proper identification and clearance before entry into its premises, the person shall make necessary arrangements with its security personnel so that, upon presentation of suitable identification, the designated Town staff will be permitted to enter without delay for the purposes of performing specific responsibilities.

(c) Designated Town staff shall have the right to set up on the person's property such devices as are necessary to conduct sampling and/or monitoring of the person's Stormwater operations or discharges.

(d) Any temporary or permanent obstruction to safe and easy access to the areas to be inspected and/or monitored shall be removed promptly by the person at the written or verbal request of the Town staff. The costs of clearing such access shall be borne by the person.

(e) The Public Works Director or Town Engineer or designee, may inspect the facilities of any user in order to ensure compliance with this Title. Such inspection shall be made with the consent of the owner, manager, or signatory official. If such consent is refused, denied or not promptly addressed, the designated Town staff may seek issuance of an administrative search warrant.

(f) The Town has the right to determine and impose inspection schedules necessary to enforce the provisions of this article. Inspections may include, but are not limited to, the following:

(i) An initial inspection prior to Stormwater Management Plan approval;

(ii) A bury inspection prior to burial of any underground drainage structure;

(iii) Erosion control inspections as necessary to ensure effective control of Erosion and sedimentation; and

(iv) A finish inspection when all work, including installation of storm management facilities, has been completed.

(v) Regular or random follow-up inspections to ensure the storm management facilities remain in compliance.

14-602. Definitions. For the purpose of this section, the following definitions shall apply: Words used in the singular shall include the plural, and the plural shall include the singular; words used in the present tense shall include the future tense. The word "shall" is mandatory and not discretionary. The word "may" is permissive. Words not defined in this section shall be construed to have the meaning given by common and ordinary use as defined in the latest edition of Webster's Dictionary.

- (1) "100-Year Flood Event." See Base Flood.
- (2) "Active Channel." The portion of the Stream Channel that is subject to frequent flows (approximately once every two (2) years) and the portion of the Channel below the Floodway.
- (3) "Active construction site." Any site that has a permit for grading or other related activities (even if actual construction is not proceeding) and any site where construction is occurring regardless of permits acquired.
- (4) "Appeal." A request for a review of the Town of Smyrna Engineer's interpretation of any provisions of these regulations.
- (5) "Aquatic Resource Alteration Permit (ARAP)." Examples of stream alterations that require a permit from the TDEC Division of Water Resources and/or U.S. Army Corp of Engineers include:
 - (a) Dredging, excavation, channel widening, or straightening
 - (b) Bank sloping; stabilization
 - (c) Channel relocation
 - (d) Use of any motorized equipment between the top of banks
 - (e) Water diversions or withdrawals
 - (f) Construction/removal of dams, weirs, dikes, levees, similar structures
 - (g) Flooding, excavating, draining and/or filling a wetland
 - (h) Road and utility crossings
 - (i) Structural fill

Note: No person or entity shall violate any provision of a general or specific ARAP permit.

- (6) "Architect." An Architect duly registered, licensed or otherwise authorized by the State of Tennessee to practice in the field of Building architecture.
- (7) "As-built plans." means drawings depicting conditions as they were actually constructed. Their submittal and approval is a requirement for the issuance of a certificate of occupancy.
- (8) "Base flood." A Flood that has an average frequency of occurrence of once in one hundred (100) years, determined from an analysis of Floods on a particular watercourse and other watercourses in the same general region. Statistically, it has a one percent chance of occurring in any given year, it may also be known as the "100-year flood event."

(9) "Blue line streams." Streams that are represented on the United States Department of the Interior, Geological Survey (USGS) 1:24,000 topographic quadrangle maps.

(10) "Best management practices or (BMP's)." means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to waters of the state. BMP's also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

(11) "BMP treatment train." A technique for progressively selecting various stormwater management practices to address water quality, by which groups of practices may be used to achieve a treatment goal while optimizing effectiveness, maintenance needs, and space.

(12) "Borrow pit." is an excavation from which erodible material (typically soil) is removed to be used as fill for another site. There is no processing or separation of erodible material conducted at the site. Given the nature of activity and pollutants present at such excavation, a borrow pit is considered a construction activity for the purpose of this permit.

(13) "Bridge." A manmade structure spanning and providing passage over a waterway to allow for the conveyance of Stormwater flows. Spans of twenty feet (20') or more are considered a Bridge.

(14) "Buffer Zone." means a setback from the top of water body's bank of undisturbed vegetation, including trees, shrubs and herbaceous vegetation; enhanced or restored vegetation; or the re-establishment of native vegetation bordering streams, ponds, wetlands, springs, reservoirs, or lakes, which exists or is established to protect those water bodies. The goal of the water quality buffer is to preserve undisturbed vegetation that is native to the streamside habitat in the area of the project. Vegetated, preferably native, water quality buffers protect water bodies by providing structural integrity and canopy cover (maintain cooler water temperatures) as well as stormwater infiltration, filtration, and evapotranspiration. Specific channel protection criteria shall be provided as prescribed in the BMP manuals and the Water Quality Buffer Zone definition as adopted under 14-604.1(a).

(0) "Buffer Zone Requirements."

(a) "Construction" applies to all streams adjacent to construction sites, with an exception for streams designated as impaired or Exceptional Tennessee waters, as designated by the Tennessee Department of Environment and Conservation. A 30-foot natural riparian buffer zone adjacent to all streams at the construction site shall be preserved, to the maximum extent practicable, during construction activities at the site. The water quality buffer zone is required to protect

waters of the state located within or immediately adjacent to the boundaries of the project, as identified using methodology from Standard Operating Procedures for Hydrologic Determinations (see rules to implement a certification program for Qualified Hydrologic Professionals, TN Rules Chapter 0400-40-17). Buffer zones are not primary sediment control measures and should not be relied on as such. Rehabilitation and enhancement of a natural buffer zone is allowed, if necessary, for improvement of its effectiveness of protection of the waters of the state. The buffer zone requirement only applies to new construction sites. The riparian buffer zone should be preserved between the top of stream bank and the disturbed construction area.

(b) Buffer zone requirements for discharges into either non-impaired or impaired or exceptional waters:

A natural riparian buffer zone adjacent to the receiving stream designated as impaired or exceptional waters shall be preserved, to the maximum extent practicable, during construction activities at the site. The water quality buffer zone is required to protect waters of the state (e.g., perennial and intermittent streams, rivers, lakes, wetlands) located within or immediately adjacent to the boundaries of the project, as identified on a 7.5-minute USGS quadrangle map, or as determined by the director. Buffer zones are not sediment control measures and should not be relied upon as primary sediment control measures. Rehabilitation and enhancement of a natural buffer zone is allowed, if necessary, for improvement of its effectiveness of protection of the waters of the state. The buffer zone requirement only applies to new construction sites. The riparian buffer zone should be established between the top of stream bank and the disturbed construction area.

(i) New development and significant redevelopment sites are required to preserve water quality buffers. Buffers shall be clearly marked on site development plans, Grading Permit applications, and/or concept plans. Buffer width depends on the size of the drainage area and status of the stream or other water. Streams or other waters with drainage areas less than 1 square mile will require buffer widths of 30 feet minimum. Streams or other waters with drainage areas greater than 1 square miles will require buffer widths of 60 feet minimum. A stream must have an minimum buffer width of 60 feet if it is categorized as impaired or exceptional by the State of Tennessee or if it is a direct tributary to a stream categorized as impaired or exceptional by the State of Tennessee.

Goes above
TDEC
minimum
requirement,
mimics
Murfreesboro
's decision.

- (16) "Building." Any structure built for support, shelter, or enclosure for any occupancy or storage.
- (17) "Channel." A natural or artificial watercourse with a definite bed and banks that conducts flowing water continuously or periodically.
- (18) "Common plan of development or sale." is broadly defined as any announcement or documentation (including a sign, public notice or hearing, sales pitch, advertisement, drawing, permit application, zoning request, computer design, etc.) or physical demarcation (including boundary signs, lot stakes, surveyor markings, etc.) indicating construction activities may occur on a specific plot. A common plan of development or sale identifies a situation in which multiple areas of disturbance are occurring on contiguous areas. This applies because the activities may take place at different times, on different schedules, by different operators.
- (19) "Community water." Any rivers, streams, creeks, branches, lakes, reservoirs, ponds, drainage systems, springs, wetlands, wells, and other bodies of surface or subsurface water, natural or artificial, lying within or forming a part of the boundaries of the Town of Smyrna.
- (20) "Contaminant." Any physical, chemical, biological, or radiological substance or matter in surface or groundwater that is not naturally found there.
- (21) "Cross-Drain." A Culvert used to convey flow under a road or other obstruction between Channels or surface flow.
- (22) "Critical design-storm period." Refers to the time in which detention volume must be controlled with the pre-development flow volume as a maximum limit.
- (23) "Culvert." A man-made conveyance of stormwater flows, including a pipe or other constructed conveyance .
- (24) "Cut." Portion of land surface or area from which earth has been removed or will be removed by excavation; the depth below original ground surface to the excavated surface.
- (25) "Design storm event." A hypothetical storm event, of a given frequency interval and duration, used in the analysis and design of a stormwater facility. The estimated design rainfall amounts, for any return period interval (2-yr, 5-yr, 10-yr, 25-yr, 50-yr, 100-yr, etc.) in terms of either 24-hour depths or intensities for any duration, can be found by accessing the following NOAA National Weather Service Atlas 14 data for Tennessee:
http://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html?bkmrk=tn.
Other data sources may be acceptable with prior written approval by TDEC Water Pollution Control.

(26) "Detention." The temporary delay of storm runoff prior to discharge into receiving waters.

(27) "Developer." Any individual, firm, corporation, association, partnership, trust, or authorized agents involved in commencing proceedings to effect Development of land for him/her or others.

(28) "Development." Any man-made change to improved or unimproved real estate, including but not limited to, Buildings or other Structures, mining, dredging, Filling, Grading, paving, excavating, drilling operations, or permanent storage of materials (as defined as materials of like nature stored in whole or in part for more than six months).

(29) "Discharge." Dispose, deposit, spill, pour, inject, seep, dump, leak, or place by any means, or that which is disposed, deposited, spilled, poured, injected, seeped, dumped, leaked, or placed by any means including any direct or indirect entry of any solid or liquid matter into the municipal separate storm sewer system either accidental or intentional.

(30) "Drainage Basin." A part of the surface of the earth that is occupied by and provides surface water runoff into a Stormwater Management System (MS4 or Waters of the State), which consists of a surface Stream or a body of impounded surface water together with all tributary surface Streams and bodies of impounded surface water.

(31) "Easement." An acquired privilege or right of use or enjoyment that a person, party, firm, corporation, Town, or other legal entity has in the land of another. Maintenance of easements is the sole responsibility of the property owner.

(32) "Engineer" or "Professional Engineer." An Engineer duly registered, licensed or otherwise authorized by the State of Tennessee to practice in the field of civil engineering.

(33) "Erosion." The removal of soil particles by the action of water, wind, ice, gravity, or other geological agents, whether naturally occurring or acting in conjunction with or promoted by man-made activities or effects.

(34) "Erosion Prevention (EP)." Practices implemented to prevent, through shielding, binding or other mechanism(s), the suspension of Soil particles, often associated with Erosion Prevention and Sedimentation control.

(35) "Erosion and sediment control plan." A written plan (including drawings or other graphic representations) that is designed to minimize the accelerated erosion and sediment runoff at a site during construction activities.

(36) "Excavation." See Cut.

(37) "Existing Construction." Any Structure for which the "start of construction" commenced before the effective date of these regulations.

(38) “Existing Grade.” The Slope or elevation of existing ground surface prior to Cutting or Filling.

(39) “Fill.” Portion of land surface or area to which Soil, rock, or other materials have been or will be added; height above original ground surface after the material has been or will be added.

(40) “Finished Grade.” The final Slope or elevation of the ground surface, after Cutting or Filling.

(41) “Flood or Flooding.” Water from a river, Stream, watercourse, lake, or other body of standing water that temporarily overflows and inundates adjacent lands and which may affect other lands and activities through increased surface water levels and/or increased groundwater level.

(42) “Floodplain.” The relatively flat or lowland area adjoining a river, Stream, watercourse, lake, or other body of standing water, which has been or may be covered temporarily by Floodwater. For purposes of this Title, the Floodplain is defined as the 100-year Floodplain having a one percent (1%) chance of being equaled or exceeded in any given year.

(43) “Floodway.” That portion of the Stream Channel and adjacent Floodplain required for the passage or conveyance of a 100-year Flood discharge. The Floodway boundaries are placed to limit encroachment in the Floodplain so that a discharge can be conveyed through the Floodplain without materially increasing (less than one (1) foot) the water surface elevation at any point and without producing hazardous velocities or conditions. This is the area of significant depths and velocities and due consideration should be given to effects of Fill, loss of cross sectional flow area, and resulting increased water surface elevations.

(44) “Floor.” The top surface of an enclosed area in a Building (including basement), i.e., top of slab in concrete slab construction or top of wood flooring in wood frame construction. The term does not include the floor of a garage used solely for parking vehicles.

(45) “Green Infrastructure.” The interconnected network of natural areas and other open spaces that conserves natural ecosystem values and functions, sustains clean air and water, and provides environmental and community benefits.

(46) “Green Infrastructure Practices.” Management measures that are designed, built and maintained to infiltrate, evapotranspire, harvest and/or use rainwater through the use of natural hydrologic features.

(47) “Greenways.” Linear undeveloped areas linking various types of Development by such facilities as bicycle paths, footpaths, and bridle

paths. Greenways are usually kept in their natural state except for the pathway and areas immediately adjacent to the pathway.

(48) "Groundwater." all naturally occurring water beneath the surface of the ground. Groundwater is in conveyance with the overlying surface water.

(49) "Highest Adjacent Grade." The highest natural elevation of the ground surface, prior to construction, next to the proposed walls of a Structure.

(50) "Hotspot"("priority area"). An area where land use or activities generate highly contaminated runoff, with concentrations of pollutants in excess of those typically found in stormwater.

(51) "Illicit connections." Illegal and/or unauthorized connections to the Town's separate stormwater system whether or not such connections result in discharges into that system.

(52) "Illicit discharge." Any discharge to the Town's separate storm sewer system that is not composed entirely of stormwater and not specifically exempted under §4(3).

(53) "Impaired Waters". Any segment of surface waters that has been identified by the Tennessee Department of Environment and Conservation (TDEC) as failing to support classified uses. The TDEC periodically compiles a list of such waters known as the "303(d) List".

(54) "Impervious Surface." A term applied to any ground or structural surface that water cannot penetrate or through which water penetrates with great difficulty.

(55) "Improved sinkhole." a natural surface depression that has been altered in order to direct fluids into an opening to the subsurface (throat). An improved sinkhole is a type of injection well regulated under TDEC's Underground Injection Control (UIC) program. Underground injection constitutes an intentional disposal of waste waters in natural depressions, open fractures, and crevices (such as those commonly associated with weathering of limestone/karst topography) and shall be adequately pre-treated prior to subsurface discharge.

(56) "Infiltration." means the process of surface runoff seeping/soaking into the soils rather than flowing into a detention basin, sinkhole, open fracture, or stream. Only suitable soils, determined by a qualified soil engineer or soil scientist, can serve as media used for infiltration. Infiltration areas shall be protected from any disturbance during construction by use of an orange, plastic barricade construction fence.

(57) "Inspector." a person that has successfully completed (has a valid certification) the "Fundamentals of Erosion Prevention and Sediment Control, Level I" course or equivalent course. An inspector performs and documents the required inspections, paying particular attention to time-

sensitive permit requirements, such as stabilization and maintenance activities. An inspector may also have the following responsibilities:

(a) oversee the requirements of other construction-related permits, such as Aquatic Resources Alteration Permit (ARAP) or Corps of Engineers permit for construction activities in or around waters of the state;

(b) update field SWPPP's;

(c) conduct pre-construction inspection to verify that undisturbed areas have been properly marked and initial measures have been installed; and

(d) inform the permit holder of activities that may be necessary to gain or remain in compliance with the Construction General Permit (CGP) and other environmental permits.

(58) "Invasive Exotic Plants." Plants that have been introduced from other regions and compete so successfully against natives plants that they can crowd out their competitors, thus providing a monoculture that discourages the growth of native plant species.

(59) "Land disturbing activity." Any activity on property that results in a change in the existing soil cover (both vegetative and non-vegetative) and/or the existing soil topography. Land disturbing activities include, but are not limited to, development, re-development, demolition, construction, reconstruction, grading, filling, and excavation. Land disturbing activity does not include clearing and grubbing, unless such clearing and grubbing is within sixty (60) feet of a drainage way, wetland, stream bank, or body of water and in such instance prior to approval from the department of public works is required.

(60) "Landscape Architect." A Landscape Architect duly registered, licensed or otherwise authorized by the State of Tennessee to practice in the field of Landscape Architecture.

(61) "Land Surveyor." A Land Surveyor duly registered, licensed or otherwise authorized by the State of Tennessee to practice in the field of land surveying.

(62) "Maintenance." Any activity that is necessary to keep a stormwater facility in good working order so as to function as designed. Maintenance shall include complete reconstruction of a stormwater facility if reconstruction is needed in order to restore the facility to its original operational design parameters. Maintenance shall also include the correction of any problem on the site property that may directly impair the functions of the stormwater facility.

(63) "Maintenance agreement." A document recorded in the property records that acts as a property deed restriction and provides for long-term maintenance of stormwater management practices and facilities.

(64) "Master Plan." Any study or plan prepared by or accepted by the Town of Smyrna that identifies solutions to water quantity or quality problems. Also known as basin study or plan, Flood management study or plan or water quality management study or plan.

(65) "Municipal Separate Storm Sewer System (MS4)." The conveyances owned or operated by the Town for the collection and transportation of stormwater, including the roads and streets and their drainage systems, catch basins, curbs, gutters, ditches, manmade and natural channels, and storm drains, and where the context indicates, it means the Town that owns the separate storm sewer system.

(66) "National Pollutant Discharge Elimination System Permit" or "NPDES Permit." A permit issued pursuant to 33 U.S.C. 1342.

(67) "Native Vegetation." The normal vegetation that grows or would reestablish normally after a disturbance. This does not include Invasive Exotic Plants.

(68) "Natural Ground Surface." The ground surface in its original state before any Grading, excavating, or Filling.

(69) "New Construction." Structures for which the "start of construction" commenced on or after the effective date of these regulations. The term also includes any subsequent improvements to such Structures.

(70) "NRCS." Natural Resources Conservation Service.

(71) "Off-site facility." A structural BMP located outside the subject property boundary described in the permit application for land development activity.

(72) "On-site facility." A structural BMP located within the subject property boundary described in the permit application for land development activity.

(73) "Peak flow." The maximum instantaneous rate of flow of water at a particular point resulting from a storm event.

(74) "Permittee." Any person, firm, or any other legal entity to which a Site disturbance, Grading, Stormwater, Building or other related permit is issued in accordance with Town of Smyrna regulations.

(75) "Person." Any and all persons, natural or artificial, including any individual, firm or association, and any municipal or private corporation organized or existing under the laws of this or any other state or country.

(76) "Pollutant." Anything which causes or contributes to pollution. Pollutants may include, but are not limited to, paints, varnishes, and solvents; oil and other automotive fluids; nonhazardous liquid and solid wastes and yard wastes; refuse, rubbish, garbage, litter, or other discarded and abandoned objects, and accumulations, so that same may cause or contribute to pollution; floatables; pesticides, herbicides, and

fertilizers; hazardous substances and wastes; sewage, fecal coliform and pathogens; dissolved and particulate metals; animal wastes, wastes and residues that result from constructing a Building or Structure; Sediment; and noxious or offensive matter of any kind.

(77) "Priority area"--See "Hot spot." (§ 14-603(21) of this chapter).

(78) "Redevelopment." The alteration of developed land that adds 5,000 square feet of Impervious Surface area or more, or offers a new opportunity for Stormwater controls. Demolition and reconstruction is considered Development and not Redevelopment. Note: Redevelopment is not intended to include such activities as exterior remodeling, which would not be expected to cause adverse Stormwater quality impacts.

(79) "Retention." The prevention of storm runoff from direct discharge into receiving waters. Examples include Systems which discharge through percolation, exfiltration, filtered bleed-down and evaporation processes.

(80) "Riparian Buffer Zone" See Buffer Zone.

(81) "Riparian Zone." Areas adjacent to Water Resources with a differing density, diversity, and productivity of plant and animal species relative to nearby uplands. This area provides a transition from an aquatic ecosystem to a terrestrial ecosystem.

(82) "Runoff." That portion of the precipitation which lands on a watershed area that is discharged from the area into the Town's separate stormwater system.

(83) "SCS." Soil Conservation Service now known as NRCS.

(84) "Sediment." Solid material, both mineral and organic, that is in suspension, or in bed load, is being transported, or has been moved from its site of origin by water, wind, ice, or gravity and has come to rest on the earth's surface either above or below sea level.

(85) "Sedimentation." The action of soil particles suspended in stormwater that settle in streambeds and can disrupt the natural flow of the stream and suffocate biota.

(86) "Sensitive Areas." Areas that supply critical habitat in supporting aquatic or semi-aquatic life such as Streams, sinkholes, springs, Wetlands, ponds, etc.

(87) "Slope." Degree of deviation of a surface from the horizontal, usually expressed in percent or ratio.

(88) "Soil." All unconsolidated mineral and organic material of any origin that overlies bedrock and that can be readily excavated.

(89) "Soil Engineer." A Professional Engineer, who is qualified, licensed and/or registered in the State of Tennessee to practice applied Soil mechanics and foundation engineering.

(90) "Soils report." A study of soils on a subject property with the primary purpose of characterizing and describing the soils. The soils report shall be prepared by a qualified soils engineer or Tennessee Certified Soil Scientist, who shall be directly involved in the soil characterization either by performing the investigation or by directly supervising employees conducting the investigation.

(91) "Stabilization." Providing adequate measures, vegetative and/or structural, that will prevent or minimize erosion from occurring.

(92) "Steep Slope" A natural or created slope of 35% grade or greater. Designers of sites with steep slopes must pay attention to stormwater management in the SWPPP to engineer runoff nonerosively around or over a steep slope. In addition, site managers should focus on erosion prevention on the slope(s) and stabilize the slope(s) as soon as practicable to prevent slope failure and/or sediment discharges from the project.

(93) "Stop Work Order." An order directing the Developer and/or Permittee responsible for the Development to cease and desist all or any portion of the work which violates the provisions of this Title.

(94) "Stormwater." Stormwater runoff, snow melt runoff, surface runoff, street cleaning or maintenance, infiltration, and drainage.

(95) "Stormwater entity." the entity designated by the Town to administer the Stormwater Management Ordinance, and other stormwater rules and regulations adopted by the Town. More specifically, stormwater entity refers to the Stormwater Management Program coordinator or other Stormwater Management Program designee in their absence.

(96) "Stormwater management." The programs assigned to maintain quality and quantity of stormwater runoff to pre-development levels.

(97) "Stormwater management facilities." The drainage structures, conduits, ponds, ditches, combined sewers, sewers, and all device appurtenances by means of which stormwater is collected, transported, pumped, treated, or disposed of either manmade or natural.

(98) "Stormwater management plan." The set of drawings and other documents that comprise all the information and specifications for the programs, drainage systems, structures, BMPs, concepts, and techniques intended to maintain or restore quality and quantity of stormwater runoff to pre-development levels.

(99) "Stormwater Pollution Prevention Plan (SWPPP)." means a written plan that includes site map(s), an identification of construction/contractor activities that could cause pollutants in the stormwater, and a description of measures or practices to control these pollutants. It must be prepared and approved before construction begins. In order to effectively reduce erosion and sedimentation impacts, Best Management Practices (BMP's)

must be designed, installed, and maintained during land disturbing activities. The SWPPP should be prepared in accordance with the current Tennessee Erosion and Sediment Control Handbook. The handbook is intended for use during the design and construction of projects that require erosion and sediment controls to protect waters of the state. It also aids in the development of SWPPPs and other reports, plans, or specifications required when participating in Tennessee's water quality regulations. All SWPPP's shall be prepared and updated in accordance with Section 3 of the General NPDES Permit for Discharges of Stormwater Associated with Construction Activities and submitted with the Notice of Intent (NOI) to TDEC.

(100) "Stormwater runoff." means water flow on the surface of the ground, resulting from precipitation.

(101) "Stormwater utility." The stormwater utility created by ordinance of the Town of Smyrna or other entity designated by the Town of Smyrna, to administer the stormwater management ordinance, and other stormwater rules and regulations adopted by the Town of Smyrna.

(102) "Stripping." Any activity that removes or significantly disturbs the vegetative surface cover, including clearing and grubbing operations.

(103) "Structural BMPs." Facilities that are constructed to provide control of stormwater runoff in accordance with current approved BMP manuals.

(104) "Structure." Anything constructed or erected, the use of which requires a permanent location on or in the ground. Such construction includes but is not limited to objects such as Buildings, towers, smokestacks, carports, and walls.

(105) "Surface water." Waters upon the surface of the earth in bounds created naturally or artificially including, but not limited to, streams, other watercourses, lakes, wetlands, marshes, reservoirs, and plugged sinkholes.

(106) "TDEC." The Tennessee Department of Environment and Conservation .

(107) "Top of Bank". The ordinary high water level and break in Slope for a Water Resource.

(108) "Town." The Town of Smyrna, Tennessee.

(109) "Town Engineer." Refers to the Town of Smyrna, Town Engineer or Public Works Director who has the authority to delegate to designated staff.

(110) "Waste site." means an area where waste material from a construction site is deposited. When the material is erodible, such as soil or spoils, the site must be treated as a construction site.

(111) "Watercourse." or "Waterway." A permanent or intermittent stream or other body of water, either natural or man-made, which gathers or carries surface water.

(112) "Water Quality Buffer." see Buffer Zone.

(113) "Water Resources." Streams, seeps, springs, Wetlands, sinkholes, or lakes as determined by the Public Works Director or Town Engineer.

(114) "Watershed." All land area that contributes runoff to a particular point along a waterway as well as the entire waterway.

(115) "Waters or waters of the state" any and all water, public or private, on or beneath the surface of the ground, which are contained within, flow through, or border upon Tennessee or any portion thereof except those bodies of water confined to and retained within the limits of private property in single ownership, which do not combine or effect a junction with natural surface or underground waters.

(116) "Wetland(s)." those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted to life in saturated, hydric soil conditions. Wetlands include, but are not limited to, swamps, marshes, bogs, and similar areas.

(117) "Wet-weather conveyances." are man-made or natural watercourses, including natural watercourses that have been modified by channelization, that flow only in direct response to precipitation runoff in their immediate locality and whose channels are above the groundwater table and are not suitable for drinking water supplies; and in which hydrological and biological analyses indicate that, under normal weather conditions, due to naturally occurring ephemeral or low flow, there is not sufficient water to support fish or multiple populations of obligate lotic aquatic organisms whose life cycle includes an aquatic phase of at least two months. (Rules and Regulations of the State of Tennessee, Chapter 1200-4-3-.04(3)).

(Ord. #04-48, Jan. 2005, modified)

14-603. Grading Permits. (1) Requirements. No Grading or Building Permit shall be issued until the applicant has submitted all required State and/or Federal permits which include but are not limited to a Notice of Coverage (NOC), Wetland Permit, Aquatic Resource Alteration Permit (ARAP), Injection Well Permit, and/or TDOT permit(s).

(2) Every person shall be required to obtain a Grading Permit which will be utilized as the permit required by the Town of Smyrna Public Works Department in the following cases:

(a) Land disturbing activity disturbs one (1) or more acres of land, unless exempted under Section 4(3);

(b) Land disturbing activity of less than one (1) acre of land if such activity is part of a larger common plan of development that affects one (1) or more acre of land;

(c) Land disturbing activity of less than one (1) acre of land, if, at the discretion of the Town of Smyrna Public Works Department, such activity poses a unique threat to water, public health, or safety; and

(d) The creation and use of borrow pits.

(3) Exemptions. The following activities are exempt from the permit requirement:

(a) Any emergency activity that is immediately necessary for the protection of life, property, or natural resources;

(b) Existing nursery and agricultural operations conducted as a permitted main or accessory use;

(c) Any logging or farming activity that complies with conservation practices or timber management practices prepared or approved by the Rutherford County Soil Conservation District or University of Tennessee Agricultural Extension Service;

(d) Additions or modifications to existing single family structures.

(4) Application for grading permit.

(a) Each application shall include the following:

(i) Name of applicant;

(ii) Business or residence address of applicant;

(iii) Name, physical address, email address, and telephone number of the owner of the property of record in the office of the assessor of property;

(iv) Address and legal description of subject property including the tax map reference number and parcel number of the subject property;

(v) Name, physical address, email address and telephone number of the contractor and any subcontractor(s) who will perform the land disturbing activity and who shall implement the erosion and sediment control plan;

(vi) A statement indicating the nature, extent, and purpose of the land disturbing activity including the size of the area for which the permit shall be applicable and a schedule for the starting and completion dates of the land disturbing activity;

(vii) Where the property includes a sinkhole, the applicant shall obtain the appropriate permits from TDEC, Division of Water Supply;

(viii) The applicant shall obtain from all other state or federal agencies any other appropriate environmental permits that pertain to the property. However, the inclusion of those permits in the application shall not foreclose the Town of Smyrna Public Works Department from imposing additional development requirements and conditions, commensurate with this ordinance, on the development of property covered by those permits.

(ix) A pre-construction meeting with the Public Works Director, Town Engineer, or designee shall be held after all Erosion Protection Sediment Control (ESPC) measures have been installed, inspected, and approved by the Town prior to the issuance of a Grading Permit.

(x) Site Owner or Developer and/or contractor that wish to transfer Grading Permit coverage to a new Owner or Developer and/or contractor shall do so by applying for a Notice of Transfer request in the Town's Public Works Department. The Site Owner or Developer shall also be required to transfer performance sureties to the New Site Owner or Developer prior to the Town of Smyrna approving the Notice of Transfer.

(b) Each application shall be accompanied by:

(i) An erosion and sediment control plan as described in § 14-604(5); and

(ii) A stormwater management plan as described in § 14-604(4), providing for stormwater management during the land disturbing activity and after the activity has been completed.

(iii) A long-term stormwater maintenance and repair plan indicating the frequency and schedule of maintenance actions indicated in Murfreesboro Stormwater Control Manual as adopted by the Town of Smyrna. This plan shall be located on the construction plans.

(iv) A completed Maintenance Agreement of Private Stormwater Management Facilities.

(c) The Permittee(s) shall be responsible for all EPSC measures and maintenance located within the sites or sections defined in the permit regardless of individual lot ownership until a Notice of Transfer is issued by the Town of Smyrna Public Works Department.

(5) Review and approval of application.

(a) The Town of Smyrna Public Works Department will review each application for a grading permit to determine its conformance with the provisions of this ordinance. Within fifteen (15) working days after receiving an application, the Public Works Department shall provide one of the following responses in writing:

(i) Approval of the permit application;

(ii) Approval of the permit application, subject to such reasonable conditions as may be necessary to substantially secure the objectives of this ordinance, and issue the permit subject to these conditions; or

(iii) Denial of the permit application, indicating the reason(s).

(b) If the Public Works Department has granted conditional approval of the permit, the applicant shall submit a revised plan that conforms to the conditions established by the department. However, the applicant shall be allowed to proceed with their grading activity, so long as it conforms to conditions established by the department. The revised plan shall be submitted to the Public Works Department within ten (10) working days from the date of conditional approval.

(c) No construction plans will be released until the grading permit has been approved.

(6) Permit duration. Every grading permit shall expire and become null and void if substantial work authorized by such permit has not commenced within one hundred and eighty (180) calendar days of issuance, or is not complete within eighteen (18) months from the date of the commencement of construction.

(7) Inspections. Once a Grading Permit is issued, the department shall conduct regular inspections of the stormwater management system construction. All inspections shall be documented and written reports prepared that contain the following information:

(a) The date and location of the inspection;

(b) Whether construction is in compliance with the approved stormwater management plan;

(c) Variations from the approved construction specifications; and

(d) Any violations that may exist.

(8) Performance agreement/letter of credit.

(a) The Town of Smyrna Public Works Department may, at its discretion, require the submittal of a performance agreement/letter of credit prior to issuance of a permit in order to ensure that the stormwater practices are installed by the permit holder as required by the approved stormwater management plan. The amount of the installation performance agreement/letter of credit shall be the total estimated construction cost of the structural BMPs approved under the permit plus any reasonably foreseeable additional related costs, e.g., for damages or enforcement. The performance agreement/letter of credit shall contain forfeiture provisions for failure to complete work specified in the stormwater management plan. The applicant shall provide an itemized construction cost estimate complete with unit prices, which shall be subject to acceptance, amendment, or rejection by the public works department. Alternatively, the public works department shall have the right to calculate the construction cost estimates.

(b) The performance agreement/letter of credit shall be released in full only upon submission of as-built plans and written certification by a registered professional engineer licensed to practice in the State of Tennessee that the structural BMP has been installed in accordance with the approved plan and other applicable provisions of this ordinance. The Town of Smyrna Public Works Department will make a final inspection of the Structural BMP to ensure that it is in compliance with the approved plan and the provisions of this ordinance. Provisions for a partial pro-rata reduction of the performance agreement/letter of credit based on the completion of various development stages can be made at the discretion of the public works department. (Ord. #04-48, Jan. 2005)

(9) Waivers. (1) General. No waivers will be granted to any construction or site work project. All construction and site work shall provide for stormwater management as required by this ordinance. However, alternatives to the 2010 NPDES General Permit for Discharges from Small Municipal Separate Storm Sewer Systems primary requirement for on-site permanent stormwater management may be considered, if:

(a) Management measures cannot be designed, built and maintained to infiltrate, evapotranspire, harvest and/or use, at a minimum, the first inch of every rainfall event preceded by 72 hours of no measurable precipitation. This remainder of the first inch of rainfall must be 100% managed with no discharge to surface waters as per section 14-604.6

(b) It can be demonstrated that the proposed development is not likely to impair attainment of the objectives of this chapter. Alternative minimum requirements for on-site management of stormwater discharges have been established in a stormwater management plan that has been approved by the Town.

(2) Downstream damage, etc. prohibited. In order to receive consideration, the applicant must demonstrate, to the satisfaction of the Public Works Department, the proposed alternative will not lead to any of the following conditions downstream:

(a) Deterioration of existing culverts, bridges, dams, and other structures;

(b) Degradation of biological functions or habitat;

(c) Accelerated stream bank or streambed erosion or siltation; or

(d) Increased threat of flood damage to public health, life, or property.

(3) Grading Permit not issued where waiver requested. No Grading Permit shall be issued where an alternative has been

requested until the alternative is approved. If no alternative is approved, the plans must be resubmitted with a stormwater management plan that meets the primary requirement for on-site stormwater management section 14-604.6. (Ord. #04-48, Jan. 2005)

14-604. Stormwater system design: Construction and Permanent stormwater management. (1) MS4 Stormwater design, BMP manuals, and Illicit Discharge Detection and Elimination.

(a) Adoption. The Town of Smyrna adopts as its MS4 Stormwater design and BMP manuals for stormwater management, construction and permanent, the following publications (as such publications may hereafter be amended and/or restated from time to time), which are incorporated by reference in this ordinance as is fully set out herein:

(I) Town of Smyrna Subdivision Regulations (as adopted and/or amended from time to time by the Smyrna Municipal Planning Commission)

(II) TDEC Erosion Prevention and Sediment Control Handbook; most current edition.

() Guide to the Selection and Design of Stormwater Best Management Practices: A Guide for Phase II MS4 Communities for Protecting Post-Construction Stormwater Quality and Managing Stormwater Flow, with the exception that Appendices A, B, C, and D are expressly excluded from adoption and reference herein.

(iv) TDEC Tennessee Permanent Stormwater Management and Design Manual.

(v) Murfreesboro Stormwater Control Manual

(vi) Collection of MS4 approved BMP's developed or collected by the MS4 that comply with the goals of the MS4 permit and/or the CGP.

(vii) EPA Illicit Discharge Detection and Elimination Manual; most current addition.

(b) The Town's BMP manual(s) include a list of acceptable BMPs, including the specific design performance criteria and operation and maintenance requirements for each stormwater practice. These include Town approved BMP's for permanent stormwater management, including green infrastructure BMP's.

(c) The Town's manual(s) may be updated and expanded from time to time, at the discretion of the Smyrna Town Council, upon the recommendation of the Town of Smyrna Public Works Department, based on improvements in engineering, science, monitoring, and local maintenance experience, or changes in federal or state law or regulation. Stormwater facilities that are designed, constructed, and maintained in accordance with these BMP criteria will be presumed to meet the minimum water quality performance standards.

(2) Land development. This section shall be applicable to all land development, including, but not limited to, site plan applications, subdivision applications, and grading permit applications. These standards apply to any new development or redevelopment site that meets one or more of the following criteria:

(a) One (1) acre or more;

(i) New development that involves land development activities of one (1) acre or more;

(ii) Redevelopment that involves other land development activity of one (1) acre or more;

(b) Projects or developments of less than one acre of total land disturbance may also be required to obtain authorization under this ordinance if:

(i) the stormwater entity has determined that the stormwater discharge from a site is causing, contributing to, or is likely to contribute to a violation of a state water quality standard;

(ii) the stormwater entity has determined that the stormwater discharge is, or is likely to be a significant contributor of pollutants to waters of the state;

(iii) changes in state or federal rules require sites of less than one acre that are not part of a larger common plan of development or sale to obtain a stormwater permit;

(iv) Any new development or redevelopment, regardless of size, that is defined by the stormwater entity to be a hotspot land use; or

(v) Minimum applicability criteria set forth in item (a) above if such activities are part of a larger common plan of development even multiple that is part of a separate and distinct land development activity that may take place at different times on different schedules.

Note: Any discharge of stormwater or other fluid to an existing sinkhole or other injection well, as defined, must be authorized by permit or be ruled as a Class V Underground Injection well under the provisions of

Tennessee Department of Environment and Conservation (TDEC) Rules, Chapter 1200-4-6.

(3) Submittal of a copy of the NOC, SWPPP, and NOT to the local MS4.

Permittees who discharge stormwater through an NPDES-permitted municipal separate storm sewer system (MS4), who are not exempted in section 1.4.5 (Permit Coverage through Qualifying Local Program) of the Construction General Permit (CGP) must provide proof of coverage under the Construction General Permit (CGP); submit a copy of the Stormwater Pollution Prevention Plan (SWPPP); and at project completion, a copy of the signed Notice of Termination (NOT) to the stormwater entity. Permitting status of all permittees covered (or previously covered) under this general permit as well as the most current list of all MS4 permits is available at the TDEC's DataViewer website. Copies of additional applicable local, state, or federal permits (i.e. ARAP, etc.) must also be provided upon request. If requested, these permits must be provided before the issuance of any grading permit or the equivalent.

(4) Stormwater Pollution Prevention Plan (SWPPP) for Construction Stormwater Management. The applicant must prepare a stormwater pollution prevention plan for all construction activities that complies with subsection (5) below. The purpose of this plan is to identify construction/contractor activities that could cause pollutants in the stormwater, and to describe measures or practices to control these pollutants during project construction.

(5) Stormwater Pollution Prevention Plan requirements. The Erosion Prevention and Sediment Control Plan component of the SWPPP shall accurately describe the potential for soil erosion and sedimentation problems resulting from grading activity and shall explain and illustrate the measures that are to be taken to control these problems. The length and complexity of the plan is to be commensurate with the size of the project, severity of the site condition, and potential for off-site damage. If necessary, the plan shall be phased so that changes to the site during construction, which alter drainage patterns or characteristics, will be addressed by an appropriate phase of the plan. The plan shall be sealed by a registered professional engineer or landscape architect licensed in the State of Tennessee. The plan shall conform to the requirements found in the TDEC General NPDES Permit for Construction Activities, MS4 BMP manuals, and shall include at least the following:

(a) Project description - Briefly describe the intended project and proposed land disturbing activity including number of units and structures to be constructed and infrastructure required.

(b) A topographic map with contour intervals of five (5) feet or less showing present conditions and proposed contours resulting from land disturbing activity.

(c) All existing drainage ways, including intermittent and wet-weather. Include any designated floodways or flood plains. Include any designated floodways or flood plains whether published by the Federal Emergency Management Agency (FEMA) or as designated by sound engineering practices and hydraulic calculations.

(d) A general description of existing land cover. Individual trees and shrubs do not need to be identified.

(e) Stands of existing trees as they are to be preserved upon project completion, specifying their general location on the property. Differentiation shall be made between existing trees to be preserved, trees to be removed and proposed planted trees. Tree protection measures must be identified, and the diameter of the area involved must also be identified on the plan and shown to scale. Information shall be supplied concerning the proposed destruction of exceptional and historic trees in setbacks and buffer strips, where they exist. Complete landscape plans may be submitted separately. The plan must include the sequence of implementation for tree protection measures.

(f) Approximate limits of proposed clearing, grading, and filling.

(g) Approximate flows of existing stormwater leaving any portion of the site.

(h) A general description of existing soil types and characteristics and any anticipated soil erosion and sedimentation problems resulting from existing characteristics.

(i) Location, size, and layout of proposed stormwater and sedimentation control improvements.

(j) Existing and proposed drainage network.

(k) Proposed drain tile or waterway sizes.

(l) Approximate flows leaving site after construction and incorporating water run-off mitigation measures. The evaluation must include projected effects on property adjoining the site and on existing drainage facilities and systems. The plan must address the adequacy of outfalls from the development: when water is concentrated, what is the capacity of waterways, if any, accepting stormwater off-site; and what measures, including infiltration, sheeting into buffers, etc., are going to be used to prevent the scouring of waterways and drainage areas off-site, etc.

(m) The projected sequence of work represented by the grading, drainage, and sedimentation and erosion control plans as related to other

major items of construction, beginning with the initiation of excavation and including the construction of any sediment basins or retention/detention facilities or any other structural BMP's.

(n) Specific remediation measures to prevent erosion and sedimentation run-off. Plans shall include detailed drawings of all control measures used; stabilization measures including vegetation and non-vegetation measures, both temporary and permanent, will be detailed. Detailed construction notes and a maintenance schedule shall be included for all control measures in the plan.

(o) Specific details for: the construction of stabilized construction entrance/exits, silt fence or approved alternate, concrete washouts, check dams, rock rings, storm drain protection, and sediment traps/basins; road access points; eliminating or keeping soil, sediment, and debris on streets and public ways at a level acceptable to the Town. Soil, sediment, and debris brought onto streets and public ways must be removed by the end of the work day to the satisfaction of the Town. Failure to remove the sediment, soil, or debris/litter shall be deemed a violation of this ordinance.

(p) Proposed structures: location and identification of any proposed additional buildings, structures, or development on the site.

(q) A description of on-site measures to be taken to recharge surface water into the groundwater system through runoff reduction practices.

(r) Specific details for construction waste management. Construction site operators shall control waste, such as discarded building materials, concrete truck washout, petroleum products, and petroleum related products, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality. When the material is erodible, such as soil or spoils, the site must be treated as a construction site. Containment pits for fuel and other fluids kept on site shall have 110% containment.

(6) General design performance criteria for permanent stormwater management: The following performance criteria shall be addressed for permanent stormwater management at all development sites:

(a) **Applicable to all sites approved prior to September 1, 2024** All sites shall achieve minimum standards of design set forth in the Tennessee Construction General Permit (CGP), in particular the standards of 5.5.3.5 and 6.4.1 regarding design storms, drainage areas, and the different standards for discharges into waters with unavailable parameters and exceptional Tennessee waters. These practices shall seek to utilize impervious areas for stormwater treatment and to infiltrate stormwater runoff from driveways, sidewalks, rooftops, parking lots and landscaped areas to the maximum extent practical to provide treatment for both water quality and quantity.

Applicable to all sites approved after January 1, 2017.

Site design standards for all new and redevelopment require, in combination or alone, management measures that are designed, built, and maintained to infiltrate, evapo-transpire, harvest, and/or use, at a minimum, the minimum standards of design set forth in the Tennessee Construction General Permit (CGP), in particular the standards of 5.5.3.5 and 6.4.1 regarding design storms, drainage areas, and the different standards for discharges into waters with unavailable parameters and exceptional Tennessee waters.

(b) Limitations to the application of runoff reduction requirements include, but are not limited to:

(i) Where a potential for introducing pollutants into the groundwater exists, unless pretreatment is provided;

(ii) Where pre-existing soil contamination is present in areas subject to contact with infiltrated runoff;

(iii) Presence of sinkholes or other karst features.

(c) Pre-development infiltrative capacity of soils at the site may be taken into account in selection of runoff reduction management measures.

(d) For projects that cannot meet 100% of the runoff reduction requirement, the remainder of the stipulated amount of rainfall must be treated prior to discharge with a technology documented to remove 80% total suspended solids (TSS) unless an alternative provided under this ordinance is approved. The treatment technology must be designed, installed and maintained by the property owner or Property Owner's Association to continue to meet this performance standard.

(e) To protect stream channels from degradation, specific channel protection criteria shall be provided as prescribed in the MS4 BMP manuals and the Water Quality Buffer Zone definition.

(f) Stormwater discharges to critical areas with sensitive resources (i.e., sinkholes, wetlands, cold water fisheries, shellfish beds, swimming beaches, recharge areas, water supply reservoirs) may be subject to additional performance criteria, or may need to utilize or restrict certain stormwater management practices.

(g) Stormwater discharges from hot spots may require the application of specific structural BMP's and pollution prevention practices. In addition, stormwater from a hot spot land use may not be infiltrated.

(h) Prior to or during the site design process, applicants for grading permits shall consult with the stormwater entity to determine if they are subject to additional stormwater design requirements.

(i) The calculations for determining peak flows as found in the subdivision regulations shall be used for sizing all stormwater facilities.

(7) Minimum volume control requirements. The following performance criteria shall be addressed for permanent stormwater management at all development sites:

(a) Stormwater designs shall meet the multi-stage storm frequency storage requirements as identified in the subdivision regulations. All sites shall control peak flow rates of stormwater discharge associated with the design storms specified in the subdivision regulations and reduce the generation of post-construction stormwater runoff to a minimum of pre-construction levels.

(b) If hydrologic or topographic conditions warrant greater control than that provided by the minimum control requirements, the stormwater entity may impose any and all additional requirements deemed necessary to control the volume, timing, release velocities, and rate of runoff.

(8) Permanent Stormwater Management Plan requirements. The Stormwater Management Plan shall include sufficient information to allow the stormwater entity to evaluate the environmental characteristics of the project site, the potential impacts of all proposed development of the site, both present and future, on the water resources, and the effectiveness and acceptability of the measures proposed for managing stormwater generated at the project site. To accomplish this goal, the Stormwater Management Plan shall include the following:

(a) Topographic base map: Topographic base map of the site which extends a minimum of 100 feet beyond the limits of the proposed development and indicates:

(i) Existing surface water drainage, including streams, ponds, culverts, ditches, sinkholes, wetlands; and the type, size, elevation, etc., of nearest upstream and downstream drainage structures;

(ii) Topographic contours at a reasonable interval to infer surface water flow patterns.

(iii) Current land use, including all existing structures, locations of utilities, roads, and easements;

(iv) All other existing significant natural and artificial features;

(v) Proposed land use with tabulation of the percentage of surface area to be adapted to various uses; drainage patterns; locations of utilities, roads and easements; the limits of clearing and grading.

(b) BMP: Proposed structural and non-structural BMP's;

(c) Description: A written description of the site plan and justification of proposed changes in natural conditions may also be required;

(d) Calculations: Hydrologic and hydraulic design calculations for the pre-development and post-development conditions for the design storms specified in the subdivision regulations. These calculations must show that the proposed stormwater management measures are capable of controlling runoff from the site in compliance with this chapter and the guidelines of the subdivision regulations. Such calculations shall include:

- (i) A description of the design storm frequency, duration, and intensity where applicable;
- (ii) Time of concentration;
- (iii) Soil curve numbers or runoff coefficients, including assumed soil moisture conditions;
- (iv) Peak runoff rates and total runoff volumes for each watershed area;
- (v) Infiltration rates, where applicable;
- (vi) Culvert, stormwater sewer, ditch and/or other stormwater conveyance capacities;
- (vii) Flow velocities;
- (viii) Data on the increase in rate and volume of runoff for the design storms referenced in the subdivision regulations; and
- (ix) Documentation of sources for all computation methods and field test results.

(e) Soils information: If a stormwater management control measure depends on the hydrologic properties of soils (e.g. detention / infiltration basins) then a soils report, investigated and reported by a Tennessee Certified Soil Scientist or Soils Engineer, shall be submitted. The soils report shall be based on on-site boring logs or soil pit profiles and soil survey reports to include at a minimum depth to seasonal high groundwater table elevation (if encountered), groundwater table elevation (if encountered), depth to bedrock, and hydraulic soil group. If infiltration is used during stormwater design in-situ infiltration rates must be provided. The number and location of required soil borings or soil pits shall be determined based on what is needed to determine the suitability and distribution of soil types present at the location of the control measure. At least one (1) soil boring or soil pit will be installed within the vicinity of the proposed stormwater management facility.

(f) Gutter spread Requirements: Gutter spread within new, widened, and extended roadways is limited to $1/2$ the travel lane as specified in the Subdivision Regulations.

(9) Maintenance and repair plan: The design and planning of all permanent stormwater management facilities including detention basins shall include detailed maintenance and repair procedures to ensure their continued performance. These plans will identify the parts or components of a stormwater management facility that need to be maintained and the equipment and skills or training necessary. Provisions for the periodic review and evaluation of the effectiveness of the maintenance program and the need for revisions or additional maintenance procedures shall be included in the plan. A permanent elevation benchmark shall be identified in the plans to assist in the inspection of the facility. All common space containing components such as detention basin or other permanent BMPs must be managed by a Homeowner's Association (HOA), Condominium Association, or other property management company. The applicant shall present a detailed plan for management of vegetation at the site after construction is finished, including who will be responsible for the maintenance of vegetation at the site and what practices will be employed to ensure that adequate vegetative cover is preserved.

(10) Maintenance easements. The applicant shall ensure access to the site for the purpose of inspection and repair by securing all the maintenance easements needed. These easements shall be binding on the current property owner and all subsequent owners of the property and shall be properly recorded with the Rutherford County Register of Deeds in perpetuity.

14-605. Permanent stormwater management: operation, maintenance, and inspection. (1) As-built plans. All applicants are required to submit actual as-built plans for any structures located on-site after final construction is completed. The plan must show the final design specifications for all stormwater management facilities and must be sealed by a registered professional engineer licensed to practice in the State of Tennessee. A final inspection by the Public Works Department is required before any performance agreement/letter of credit will be released. The Public Works Department shall have the discretion to adopt provisions for a partial pro-rata reduction of the performance agreement/letter of credit on the completion of various stages of development. In addition, occupation permits certificate of occupation permits or signing of the final plat may not be granted until corrections to all BMPs have been made and accepted by the Public Works Department.

(2) Landscaping and stabilization requirements. (a) Any area of land from which the natural vegetative cover has been either partially or entirely cleared by development activities shall be revegetated according

to a schedule approved by the Town of Smyrna Public Works Department. Stabilization measures shall be initiated as soon as possible in portions of the site where construction activities have temporarily or permanently ceased. Temporary or permanent soil stabilization at the construction site (or a phase of the project) must be completed no later than 15 days after the construction activity in that portion of the site has temporarily or permanently ceased. In the following situations, temporary stabilization measures are not required:

(i) where the initiation of stabilization measures is precluded by snow cover or frozen ground conditions or adverse soggy ground conditions, stabilization measures shall be initiated as soon as practicable; or

(ii) where construction activity on a portion of the site is temporarily ceased, and grading will be resumed within 15 days.

(iii) Areas of steep slope that have not been worked in 7 days must be stabilized.

(b) Permanent stabilization with perennial vegetation (using native herbaceous and woody plants where practicable) or other permanently stable, non-eroding surface shall replace any temporary measures as soon as practicable. Unpacked gravel containing fines (silt and clay sized particles) or crusher runs will be considered an eroding surface.

(c) The following criteria shall apply to revegetation efforts:

(i) Reseeding must be done with an annual or perennial cover crop accompanied by placement of straw mulch or its equivalent of sufficient coverage to control erosion until such time as the cover crop is established over ninety percent (90%) of the seeded area.

(ii) Placement of straw mulch or its equivalent of sufficient coverage to control erosion until the plantings are established and are capable of controlling erosion shall accompany replanting with native woody and herbaceous vegetation;

(iii) Any area of re-vegetation must exhibit survival of a minimum of seventy-five percent (75%) of the cover crop throughout the year immediately following re-vegetation or exhibit no erosion based on Public Works Department field review. Re-vegetation shall be repeated in successive years until the aforementioned criteria are achieved. If erosion should occur anywhere on-site it should be repaired to the satisfaction of the Public Works Department.

(d) In accordance with the TDEC's Construction General Permit, an Erosion Prevention and Sediment Control (EPSC) plan must be submitted with the final design describing the vegetative stabilization and management techniques to be used at a site after construction is completed. This plan will explain not only how the site will be stabilized after construction, but who will be responsible for the maintenance of vegetation at the site and what practices will be employed to ensure that adequate vegetative cover, general landscaping, and landscaping located around the perimeter of the detention and retention ponds are preserved.

(3) Inspection of stormwater management facilities. Inspections of facilities are performed by the Public Works Department, while detailed procedures, entitled Detention Pond Inspection Procedures may be found as a separate document on the Storm Water Management program's website. Periodic inspections of facilities shall be documented, and reported in accordance with this chapter.

(4) Stormwater Management on New Build Lots. Drainage on new construction build lots shall be managed complementary to the plan engineered for the larger or neighboring development. Storm gutters and down spouts, sump pumps, and other outlets draining stormwater or other authorized runoff shall be piped or otherwise channeled into a conveyance that will adequately drain runoff from the property. At no time shall runoff be directed onto a neighboring lot, so that it flows outside of the drainage easement. Stormwater and other drainage shall be managed on each lot, property, or site, so it will not cause damage or become a nuisance to a neighboring property. Storm drainage shall be properly routed to the nearest main drainage swale, street curb, or other appropriate stormwater conveyance structure to ensure proper drainage from the site.

(5) Owner responsibilities. (a) The owner shall be responsible for the maintenance and repair of the stormwater facility of the property upon which the facility is located and be recorded as such on the plat for the property by appropriate notation.

(b) The owner shall provide that the minimum maintenance and repair needs include, but are not limited to: the removal of silt, litter, and other debris, the cutting of grass, cutting and vegetation removal, and the replacement of landscape vegetation, in detention and retention basins, inlets and drainage pipes, and any other stormwater facilities. The property owner shall also be responsible for additional maintenance and repair needs consistent with the needs and standards outlined in the MS4 BMP manuals.

(c) The owner shall provide that maintenance needs must be addressed in a timely manner, on a schedule to be approved by the Stormwater Management Program.

(d) For underground stormwater management systems, the owner or their assigned is required to conduct a stormwater inspection based on manufacturer's recommendations for inspections. This inspection must be conducted by an engineer licensed in the State of Tennessee or someone under their responsible charge. A copy of the inspection report must be submitted to the Town

(6) Requirements for existing problem locations. (a) Upon approval by the town manager, the Public Works Department shall, in writing, notify the owners of existing locations and developments of specific drainage, erosion, or sediment problems affecting or cause by such locations and developments, and the specific actions required to correct those problems. The notice shall also specify a reasonable time for compliance. Discharges from existing BMP's that have not been maintained and/or inspected in accordance with this ordinance shall be regarded as illicit.

(b) The Public Works department may, to the extent authorized by state and federal law, enter and inspect private property for the purpose of determining if there are illicit non-stormwater discharges and/or establish inspection programs to verify that all stormwater management facilities, including those built before as well as after the adoption of this ordinance, are functioning within design limits. These inspection programs may be established on any reasonable basis, including but not limited to: routine inspections; random inspections; inspections based upon complaints or other notice of possible violations; inspection of drainage basins or areas identified as higher than typical sources of sediment or other contaminants or pollutants; inspections of businesses or industries of a type associated with higher than usual discharges of contaminants or pollutants or with discharges of a type which are more likely than the typical discharge to cause violations of the Town of Smyrna's NPDES stormwater permit; and joint inspections with other agencies inspecting under environmental or safety laws. Inspections may include, but are not limited to:

- (i) Reviewing maintenance and repair records;
- (ii) Sampling discharges, surface water, groundwater, and material or water in drainage control facilities; and
- (iii) Evaluating the condition of drainage control facilities and other BMPs.

(7) Requirements for all existing locations and ongoing developments. The following requirements shall apply to all locations and development at which land disturbing activities have occurred previous to the enactment of this ordinance:

(a) Denuded areas must be vegetated or covered under the standards and guidelines specified in 14-605 and on a schedule acceptable to the stormwater entity.

(b) Cuts and slopes must be properly covered with appropriate vegetation and/or retaining walls constructed.

(c) Drainage ways shall be properly covered in vegetation or secured with rip-rap, channel lining, or other appropriate BMPs, to prevent erosion.

(d) Trash, junk, litter, etc. shall be cleared from drainage ways.

(e) Stormwater runoff shall, at the discretion of the stormwater entity be controlled to the maximum extent practicable to prevent its pollution. Such control measures may include, but are not limited to, the following:

(i) Ponds:

- (1) Detention pond
- (2) Extended detention pond
- (3) Wet pond
- (4) Alternative storage measures

(ii) Constructed wetlands.

(iii) Infiltration systems:

- (1) Infiltration/percolation trench
- (2) Infiltration basin
- (3) Drainage (recharge) well
- (4) Porous pavement

(iv) Filtering systems:

- (1) Catch basin inserts/media filter
- (2) Sand filter
- (3) Filter/absorption bed
- (4) Filter and buffer strips

(v) Open channel:

- (1) Swale
- (2) Natural conveyance

(8) Corrections of problems subject to appeal. Corrective measures imposed by the Town of Smyrna Public Works Department under this section are subject to appeal under section 14-610 of this chapter. (Ord. #04-48, Jan. 2005)

(9) Failure to meet or maintain design or maintenance standards. If a responsible party fails or refuses to meet the design or maintenance standards required for stormwater facilities under this ordinance, the Public Works Department, after reasonable notice, may correct a violation of the design standards or maintenance needs by performing all necessary work to place the facility in proper working condition. In the

event that the stormwater management facility becomes a danger to public safety or public health, the Public Works Department shall notify, in writing, the party responsible for maintenance of the stormwater management facility. Upon receipt of that notice the responsible party shall have thirty (30) calendar days to effect maintenance and repair of the facility in an approved manner. In the event that corrective action is not undertaken within that time, the Public Works Department may take necessary corrective action. The cost of any action by the Public Works Department under this section shall be charged to the responsible party. (Ord. #04-48, Jan. 2005)

14-606. Illicit discharges. (1) Scope. This section shall apply to all water generated on developed or undeveloped land entering the Town of Smyrna's separate storm sewer system.

(2) Prohibition of illicit discharges. No person shall introduce or cause to be introduced into the Town of Smyrna separate storm sewer system or state water any discharge that is not composed entirely of stormwater or any discharge that flows from stormwater facility that is not inspected in accordance with section 14-606 shall be an illicit discharge.

Non-stormwater discharges shall include, but shall not be limited to, sanitary wastewater, car wash wastewater, radiator flushing disposal, spills from roadway accidents, carpet cleaning wastewater, spillage/overflow of free standing grease receptacles, compactor/dumpster leakage, effluent from septic tanks, improper oil disposal, laundry wastewater/gray water, improper disposal of auto and household toxics. The commencement, conduct, or continuance of any non-stormwater discharge to the municipal separate storm sewer system is prohibited except as described as follows:

- (a) Uncontaminated discharges from the following sources:
 - (i) Water line flushing or other potable water sources;
 - (ii) Landscape irrigation or lawn watering with potable water;
 - (iii) Diverted stream flows;
 - (iv) Rising groundwater; i.e. storm drain infiltration
 - (v) Pumped groundwater;
 - (vi) Foundation or footing drains;
 - (vii) Crawl space pumps;
 - (viii) Air conditioning condensation;
 - (ix) Springs;
 - (x) Non-commercial washing of vehicles;
 - (xi) Natural riparian habitat or wetland flows;

- (xii) Swimming pools [if dechlorinated - typically less than one part per million (ppm) chlorine];
- (xiii) Fire fighting activities; and
- (xiv) Any other uncontaminated water source.

(b) Discharges specified in writing by the Public Works Department as being necessary to protect public health and safety.

(c) Dye testing is an allowable discharge if the Public Works Department has so specified in writing.

(d) Discharges authorized by the Construction General Permit (CGP), which comply with Section 3.5.9 of the same:

(i) dewatering of work areas of collected stormwater and ground water (filtering or chemical treatment may be necessary prior to discharge);

(ii) waters used to wash vehicles (of dust and soil, not process materials such as oils, asphalt or concrete) where detergents are not used and detention and/or filtering is provided before the water leaves site;

(iii) water used to control dust in accordance with CGP section 3.5.5;

(iv) potable water sources, including waterline flushings from which chlorine has been removed to the maximum extent practicable;

(v) routine external building wash-down that does not use detergents or other chemicals;

(vi) uncontaminated groundwater or spring water; and

(vii) foundation or footing drains where flows are not contaminated with pollutants, such as process materials such as solvents, heavy metals, etc.

(3) Prohibition of illicit connections. (a) The construction, use, maintenance, or continued existence of illicit connections to the Town of Smyrna separate storm sewer system is prohibited.

(b) This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.

(4) Reduction of stormwater pollutants by use of BMPs. Any person responsible for a property or premises, which is, or may be, the source of an illicit discharge, may be required to implement, at the person's expense, the BMPs necessary to prevent the further discharge of pollutants to the Town of Smyrna separate storm sewer system. Compliance with all terms and conditions of a valid NPDES permit authorizing the discharge of stormwater associated with industrial

activity, to the extent practicable, shall be deemed in compliance with the provisions of this section. Discharges from existing BMP's that have not been maintained and/or inspected in accordance with this ordinance shall be regarded as illicit.

(5) Notification of spills. Notwithstanding other requirements of law, as soon as any person responsible for a facility or operation, or responsible for emergency response for a facility or operation, has information of any known or suspected release of materials which are resulting in, or may result in, illicit discharges or pollutants discharging into stormwater, the Town of Smyrna separate storm sewer system, the person shall take all necessary steps to ensure the discovery, containment, and cleanup of such release. In the event of such a release of hazardous materials, the person shall immediately notify emergency response agencies of the occurrence via emergency dispatch services. In the event of a release of non-hazardous materials, the person shall notify the Public Works Department in person or by telephone, email, or facsimile no later than the next business day. Notifications in person or by telephone shall be confirmed by written notice addressed and mailed to the public works department within three (3) business days of the telephone notice. If the discharge of prohibited materials emanates from a commercial or industrial establishment, the owner or operator of such establishment shall also retain an on-site written record of the discharge and actions taken to prevent recurrences. Records shall be retained for at least three (3) years. (Ord. #04-48, Jan. 2005)

(6) No illegal dumping allowed. No person shall dump or otherwise deposit outside an authorized landfill, convenience center or other authorized garbage or trash collection point, any trash or garbage of any kind or description on any private or public property, occupied or unoccupied, inside the Town.

14-607. Enforcement. (1) Enforcement authority. The town manager, or his or her designee, hereinafter called the "director," shall have the authority to issue notices of violation (NOV) and citations, and to impose the civil penalties provided in this section. Measures authorized include:

(a) Verbal Warnings – At a minimum, verbal warnings must specify the nature of the violation and required corrective action.

(b) Written Notices – Written notices must stipulate the nature of the violation and the required corrective action, with deadlines for taking such action.

(c) Stop Work Orders – Stop work orders that require construction activities to be halted, except for those activities directed at

cleaning up, abating discharge, and installing appropriate control measures.

(d) Consent Orders with Administrative Penalties – The MS4 has the authority to assess monetary penalties, which may include civil and administrative penalties.

(e) Withholding of Plan Approvals, Permits or Other Authorizations – Where a facility is in noncompliance, the MS4's own approval process affecting the facility's ability to discharge to the MS4 can be used to abate the violation.

(f) Additional Measures – The MS4 may also use other escalated measures provided under local legal authorities. The MS4 may perform work necessary to improve erosion control measures and collect the funds from the responsible party in an appropriate manner, such as collecting against the project's bond or directly billing the responsible party to pay for work and materials.

(2) Notification of violation. (a) Verbal warning. Verbal warning may be given at the discretion of the inspector when it appears the condition can be corrected by the violator within a reasonable time, which time shall be approved by the inspector.

(b) Written notice. Whenever the director finds that any permittee or any other person discharging stormwater has violated or is violating this ordinance or a permit or order issued hereunder, the Director may serve upon such person a written NOV. Within ten (10) working days of this notice, an explanation of the violation and a plan for the satisfactory correction and prevention thereof, to include specific required actions, shall be submitted to the director. Submission of this plan in no way relieves the discharger of liability for any violations occurring before or after receipt of the NOV.

(c) Consent orders. The director is empowered to enter into consent orders, assurances of voluntary compliance, or other similar documents establishing an agreement with the person responsible for the noncompliance. Such orders will include specific action to be taken by the person to correct the noncompliance within a time period also specified by the order. Consent orders shall have the same force and effect as administrative orders issued pursuant to the following subsections (d) and (e).

(d) Show cause hearing. The director may order any person who violates this ordinance or permit or order issued hereunder, to show cause why a proposed enforcement action should not be taken. Notice shall be served on the person specifying the time and place for the meeting, the proposed enforcement action and the reasons for such action, and a request that the violator show cause why this proposed

enforcement action should not be taken. The notice of the meeting shall be served personally or by registered or certified mail (return receipt required) at least ten (10) working days prior to the hearing.

(e) Compliance order. When the director finds that any person has violated or continues to violate this ordinance or a permit or order issued there under, he/she may issue an order to the violator directing that, following a specific time period, adequate structures and/or devices be installed or procedures implemented and properly operated. Orders may also contain such other requirements as might be reasonably necessary and appropriate to address the noncompliance, including the construction of appropriate structures, installation of devices, self-monitoring, and BMPs.

(f) Cease and desist orders. When the director finds that any person has violated or continues to violate this ordinance or any permit or order issued hereunder, the director may issue an order to cease and desist all such violations and direct those persons in noncompliance to:

(i) Comply forthwith; or

(ii) Take such appropriate remedial or preventive action as may be needed to properly address a continuing or threatened violation, including halting operations and terminating the discharge.

(g) Suspension, revocation, or modification of permit. The stormwater entity may suspend, revoke or modify the permit authorizing the land development project or any other project of the applicant or other responsible person within the Town. A suspended, revoked, or modified permit may be reinstated after the applicant or other responsible person has taken the remedial measures set forth in the Notice of Violation or has otherwise cured the violations described therein, provided such permit may be reinstated upon such conditions as the stormwater entity may deem necessary to enable the applicant or other responsible person to take the necessary remedial measures to cure such violations.

(3) Conflicting standards. Whenever there is a conflict between any standard contained in this ordinance and in the BMP manual adopted by the Town of Smyrna under this ordinance, the strictest standard shall prevail. (Ord. #04-48, Jan. 2005)

14-608. Penalties. (1) Violations. Any person who shall commit any act declared unlawful under this ordinance, who violates any provision of this ordinance, who violates the provisions of any permit issued pursuant to this ordinance, or who fails or refuses to comply with any lawful communication, order, or notice to abate or take corrective action issued by either the Town of

Smyrna Public Works Department or the director, shall be guilty of a civil offense.

(2) Penalties. Under the authority provided in Tennessee Code Annotated, § 68-221-1106, penalties may include:

(a) The Town of Smyrna declares that any person violating the provisions of this ordinance may be assessed a civil penalty by the director of not less than fifty dollars (\$50.00) or not more than ten thousand dollars (\$10,000.00) per day for each day of violation. Each day of violation shall constitute a separate violation. The Town of Smyrna shall give the violator reasonable notice of the assessment of any penalty.

(b) Any person unlawfully polluting the waters of the state or not complying with TDA 69-3-101 will be committing a Class C felony.

(c) Any person knowingly and willfully falsifying records, information, plans, data required by the board or commissioner will be committing a Class E felony and pay a \$25,000 fine and may be incarcerated.

(3) Measuring civil penalties. In assessing a civil penalty, the director may consider:

(a) The harm done to the public health and/or the environment;

(b) Whether the civil penalty imposed will be a substantial economic deterrent to the illegal activity;

(c) The economic benefit gained by the violator;

(d) The amount of effort put forth by the violator to remedy this violation;

(e) Any unusual or extraordinary enforcement costs incurred by the Town of Smyrna;

(f) The amount of penalty established by ordinance or resolution for specific categories of violations; and

(g) Any equities of the situation which outweigh the benefit of imposing any penalty or damage assessment.

(4) Recovery of damages and costs. In addition to the civil penalty in the prior subsection (2), the Town of Smyrna may recover, but is not limited to recover, the following:

(a) All damages proximately caused by the violator to the Town of Smyrna, which may include any reasonable expenses incurred in investigating violations of, and enforcing compliance with, this ordinance, or any other actual damages caused by the violation; and

(b) The costs of the Town of Smyrna's maintenance of stormwater facilities when the user of such facilities fails to maintain them as required by this ordinance.

(5) Referral to TDEC.

(a) If the MS4 becomes aware that a construction activity, or an industrial stormwater discharge, exists and that the discharge must be permitted under an NPDES permit but is not so permitted, the MS4 must notify TDEC of this situation by supplying the following information to the local (Environmental Field Office) EFO:

- Construction project or industrial facility location;
- Name of owner or operator;
- Estimated construction project size or type of industrial activity (including SIC code if known);
- Records of communication with the owner or operator regarding filing requirements.

(b) Where the Town has used progressive enforcement to achieve compliance with this ordinance, and in the judgment of the Town has not been successful, the Town may refer the violation to TDEC. For the purposes of this provision, “progressive enforcement” shall mean two (2) follow-up inspections and two (2) warning letters. In addition, enforcement referrals to TDEC must include, at a minimum, the following information:

- (i) Construction project or industrial facility location;
- (ii) Name of owner or operator;
- (iii) Estimated construction project or size or type of industrial activity (including SIC code, if known);
- (iv) Records of communications with the owner or operator regarding the violation, including at least two follow-up inspections, two warning letters or notices of violation, and any response from the owner or operator.

(6) Other remedies. The Town of Smyrna may bring legal action to enjoin the continuing violation of this ordinance, and the existence of any other remedy, at law or equity, shall be no defense to any such actions.

(7) Remedies cumulative. The remedies set forth in this section shall be cumulative, not exclusive, and it shall not be a defense to any action, civil or criminal, that one (1) or more of the remedies set forth herein has been sought or granted. (Ord. #04-48, Jan. 2005)

14-609. Appeals. Pursuant to Tennessee Code Annotated, § 68-221-1106(d), any person aggrieved by the imposition of a civil penalty or damage assessment as provided by this ordinance may appeal said penalty or damage assessment to the town council.

(1) Written appeals. The appeal shall be in writing and filed with the town clerk within thirty (30) days after the civil penalty and/or damage assessment is served in any manner authorized by law. If a petition for review is not filed within such time, the violator shall be deemed to have

consented to the damage assessment and/or civil penalty and it shall become final.

(2) Public hearing. The town council shall hold a public hearing not less than thirty (30), and not more than sixty (60), days after receipt of a petition for review. At least ten (10) days advance written notice, by registered mail, shall be provided to the aggrieved party, such notice to be sent to the address provided by the aggrieved party at the time of appeal.

(3) Appealing decisions. Any alleged violator may appeal a decision of the Town Council pursuant to the provisions of Tennessee Code Annotated, title 27, chapter 8. (Ord. #04-48, Jan. 2005)

14-610. Amendments. The town council shall have the authority to enact amendments to this ordinance from time to time. (Ord. #04-48, Jan. 2005)

14-611. Right of Entry and Inspection. The Public Works Director, Stormwater Coordinator, inspector, or other duly authorized employee of the Town, upon reasonable notice to any person who is owner, tenant, or occupant of any real estate, is empowered to enter, upon presentation of proper credentials, upon or through any premises for the purposes of carrying out the objectives of this Ordinance. This right of entry shall include, but not be limited to, any equipment necessary to conduct such inspections. It shall be the duty of the person to provide all necessary clearance before entry and not to unnecessarily delay or hinder the inspector in carrying out the inspection. The right of entry shall exist at any time

Town of Smyrna

Stormwater Management Plan

I. PURPOSE

Since July 23, 2003, the Town of Smyrna officially managed its small MS4 Program in accordance with EPA regulations, 40 CFR 123.35(b). The Town of Smyrna was audited by the Tennessee Department of Environment and Conservation on three occasions as a regulated small MS4 (Municipal Separate Storm Sewer System) to be covered under the Phase II NPDES Storm Water Discharge Control Program.

II. REGULATORY REQUIREMENTS

The Phase II Stormwater Regulations, 40 CFR Part 122, require the Town of Smyrna at a minimum, to develop, implement, and enforce a stormwater management program designed to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act. The storm water management program shall be based around six Minimum Control Measures. These six Minimum Control Measures are as follows:

- PUBLIC EDUCATION AND OUTREACH
- PUBLIC INVOLVEMENT/ PARTICIPATION
- ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE)
- CONSTRUCTION SITE STORMWATER RUNOFF CONTROL
- POST CONSTRUCTION / PERMANENT STORMWATER MANAGEMENT
- POLLUTION PREVENTION AND GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

III. PUBLIC EDUCATION AND OUTREACH

PERMIT REQUIREMENTS

Permit Section 4.2.1 requires that the Town of Smyrna implement a public education and outreach program. The focus of the program shall be on impacts of stormwater discharges to water bodies and the steps that the public (along with commercial, industrial, or institutional entities) can take to reduce pollutants in the stormwater runoff.

COMPLIANCE MECHANISMS To comply with Section 4.2.1 of the General Permit, the Town of Smyrna will implement the following four Best Management Practices (BMPs):

1. Outreach events

Outreach efforts include stream bank cleanups, tree planting events, storm drain decal events, and Boat Day - WaterFests, all of which are coordinated and lead by the Storm Water Management (SWM) Program with assistance from the SRWA, Rotary Club, Street, Parks, Fire, and Police Departments, USACE (Army Corps of Engineers).

All events are documented through field activity reports that delineate the activity, number of participants, amount of debris collected, trees/bushes planted, or decals affixed, along with ample number photographs.

2. Create Environmental Educational Packets

Order and copy all applicable brochures addressing water quality then load them into large envelopes for distribution at all outreach events.

3. Project WET

Played a lead role in the creation of the contract between the Rutherford County MS4 programs and the Discovery Center. Review all documents that support this important contract.

Contribute funding for the purchasing of vital educational materials used in this contract and the Project WET teacher training workshops lead by the Discovery Center.

Serves as a peer-reviewer of the progress to be made by the contract and will serve as a guest speaker to teachers, principals, and students whenever needed

4. Stormwater Advisory Committee (SWAC)

The SWAC (StormWater Advisory Committee) consists of seven Smyrna citizens who review and approve all ordinances, policies, events, and progress/annual reports related to the SWM Program. This organization was formed in the fall of 2003 and remains a vital ingredient in the success of Smyrna's storm water efforts. All meetings (mostly monthly) are filmed and broadcasted live and repeated on the Town's Ch 3 throughout the day.

5. Stormwater Control and EPSC Maintenance Informational Video

All individuals attempting to obtain a Grading Permit must watch an educational video on selecting proper SCM controls for their site and the importance of maintaining selected controls. The video will consist of proper use cases for common measures and detail how and when they should be maintained.

IV. PUBLIC PARTICIPATION AND INVOLVEMENT

PERMIT REQUIREMENTS

Section 4.2.2 of the Permit requires that at a minimum, the Town shall implement a public involvement/participation program. Elements of the program may include participation in local stormwater management work groups, public notices of MS4 meetings and public hearings, recruiting education volunteers, and involving the public with program coordination, detection of illicit discharges and monitoring efforts.

COMPLIANCE MECHANISMS

To comply with Section 4.2.2 of the Permit, the Town of Smyrna will implement the following four BMPs:

1. Public Notice

The Town publishes all public notices and provides for a review and comment period prior to passing

any changes to the stormwater management ordinance.

2. Stormwater Advisory Committee

The Town holds its quarterly SWAC meeting to discuss citizen comments, upcoming regulations, progress and activities of the stormwater department and to make decisions concerning stormwater program elements and implementation.

3. Watershed Cleanup

The Town partners with environmental / civic, and scout groups to host watershed cleanup events. The events target specific watersheds and will consist of trash and debris removal from the stormwater conveyance systems and tributaries.

4. Stormwater Hotline

The Town maintains a telephone number and web address to be used for water quality and stormwater related complaints and issues.

5. Outstanding Business Stormwater Award

The Town will pick a business that exemplifies stormwater ideals through innovative ideas, well maintained storm structures, or other positive attributes to award a letter of appreciation to. Winners will be promoted on Town social media pages. A new business will be chosen twice a year.

V. ILLICIT DISCHARGE DETECTION AND ELIMINATION

PERMIT REQUIREMENTS

Section 4.2.3 of the Permit requires that the Town of Smyrna develop, implement, and enforce a program to detect and eliminate illicit discharges (as defined in 40 CFR Part 122.26(b)(2)) into the small MS4. 40 CFR Part 122.26(b)(2) defines an illicit discharge as any discharge to a municipal separate storm sewer that is not entirely composed of storm water, except discharges authorized under an NPDES permit (other than the NPDES permit for discharges from the MS4) and discharges resulting from fire fighting activities.

Section 4.2.3 of the Permit requires that the Town develop a storm sewer system map, showing the location of all outfalls (ie., points where the town storm sewer system discharges into waters of the state or conveyances owned or operated by another MS4).

Section 4.2.3 of the Permit requires that the Town effectively prohibit, through ordinance, or other regulatory mechanism, non-storm water discharges into the storm sewer system and implement appropriate enforcement response plans.

Section 4.2.3 of the Permit requires that the Town develop and implement a plan to detect, identify and eliminate non-storm water discharges, including illegal disposal, to the stormwater system.

Section 4.2.3 of the Permit requires that the Town inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.

Section 4.2.3 of the Permit requires that the Town address the following sources of non-storm water discharges only if they are identified as a significant contributor of pollutants to the MS4: water line

flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated groundwater infiltration (as defined in 40 CFR §35.2005(20)), uncontaminated pumped groundwater, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, and street wash water (discharges or flows from fire fighting activities are excluded from the effective prohibition against non-storm water and need only be addressed where they are identified as significant sources of pollutants to waters of the state).

Section 4.2.3 of the Permit requires that the Town, by ordinance or other regulatory mechanism, prohibit contamination of stormwater runoff from hot spots (industrial and commercial properties, including restaurants, auto repair shops, auto supply shops, and large commercial parking areas).

COMPLIANCE MECHANISMS

The Town of Smyrna will comply with each of the Permit requirements listed above through implementation of the following BMPs:

1. Education

Letters of introduction and visits by staff are made to ensure the proprietor of any business understands the importance of the IDDE program.

2. Inspections

Inspections are performed every three months to ensure that no violation goes unaddressed for very long.

3. Notices of Violations

NOVs are issued requiring immediate cleanup and remediation. Fees have been assessed against proprietors when the Town of Smyrna has had to do cleanups that have a chance of impacting neighboring water bodies.

4. Certificates of Appreciation

When a proprietor goes beyond the required practices, on their own accord, to ensure no IDDE occurs, a certificate of appreciation, signed by the mayor of the Town of Smyrna, is awarded.

VI. CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

PERMIT REQUIREMENTS

Section 4.2.4 of the Permit requires that the Town of Smyrna develop, implement, and enforce a construction site stormwater runoff control program to address pollutants in stormwater runoff to the MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of storm water discharges from construction activity disturbing less than one acre must be included in the program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more.

Section 4.2.4 of the Permit requires the Town to develop an ordinance, or other regulatory mechanism, to require erosion prevention and sediment controls, as well as sanctions to ensure compliance.

Section 4.2.4 of the Permit requires the Town to develop requirements for construction site operators to implement appropriate erosion and sediment control best management practices.

Section 4.2.4 of the Permit requires that the Town develop requirements corresponding to the Tennessee Construction General Permit, effective May 24, 2011.

Section 4.2.4 the Permit requires the Town to develop requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality.

Section 4.2.4 of the Permit requires the Town to implement procedures for site plan review, which incorporate consideration of potential water quality impacts.

Section 4.2.4 of the Permit requires that the Town implement procedures for receipt and consideration of information submitted by the public.

Section 4.2.4 of the Permit requires that the Town implement procedures for site inspection and enforcement of control measures.

Section 4.2.4 of the Permit requires that the Town staff be trained in the fundamentals of erosion prevention and sediment control and in how to review erosion and sediment control plans. At a minimum, one member of the staff must attend the Tennessee Fundamentals of Erosion Prevention and Sediment Control and the Erosion Prevention and Sediment Control Design Course.

Section 4.2.4 of the Permit requires that the Town's program provide for the following:

- (a) Recognition of priority construction activity, including at a minimum those construction activities discharging directly into, or immediately upstream of, waters the state recognizes as impaired (for siltation) or high quality;
- (b) Pre-construction meetings with construction site operators, for priority construction activities; and
- (c) Inspections by the MS4, of priority construction sites at least once per month.

COMPLIANCE MECHANISMS

The following BMPs will be implemented by the Town of Smyrna to comply with all of the requirements of the Construction Site Runoff Control portion of the Permit:

1. Education

The SWM Program mass mails TDEC EPSC changes in the form of a Fundamentals of Erosion Prevention - Sediment Control Measures guidance to all design engineers, developers, and contractors. The TDEC EPSC Handbook is also found as a link on the SWM Program website

2. Plan Reviews

TDEC Level I EPSC-approved staff reviews all plans twice before being sent to the planning commission for approval. The SWM Program Coordinator and Engineer of Record review the plans again prior to the pre-construction meeting. One of the four sets is given to the developer upon issuance of the grading permit, and must be kept on-site at all times.

3. EPSC inspections/ pre-construction meetings

All EPSC measures are inspected in accordance with the plans approved by the SWM Program Coordinator and Engineer of Record prior to the pre-construction meeting. These procedures must all be met before the grading permit can be issued by the Codes Department.

4. EPSC construction inspections — Notice of Violations

All construction sites are inspected monthly by the SWM Program staff once the grading permit is issued.

VII. POST CONSTRUCTION STORMWATER MANAGEMENT

PERMIT REQUIREMENTS

Section 4.2.3 of the Permit requires the Town to develop and update an MS4 Storm System Map detailing inputs into the storm sewer collection system, direction of flow, and receiving streams.

Section 4.2.5 of the Permit requires the Town to develop, implement, and enforce a program to address permanent (post-construction) stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into the MS4. The program must ensure that controls are in place that would prevent or minimize water quality impacts.

Section 4.2.5 of the Permit requires that the Town develop and implement strategies which include a combination of structural and/or nonstructural BMPs appropriate for the community.

Section 4.2.5 of the Permit requires that the Town must develop and implement a set of requirements to establish, protect and maintain water quality buffer zones along all waters of the state in areas of new development and redevelopment.

Section 4.2.5 of the Permit requires the Town to develop an ordinance or other regulatory mechanism to address permanent runoff from new development and redevelopment projects to the extent allowable under State or local law.

Section 4.2.5 of the Permit requires the Town to require implementation of appropriate stormwater control measure maintenance procedures for long-term maintenance of all permanent stormwater control measures. In association with this, a long-term Maintenance Agreement must be developed assigning maintenance responsibility to the owner/operator, a third party, or the permittee as appropriate.

COMPLIANCE MECHANISMS

The Town will utilize the following BMPs to comply with the Permit requirements for Post Construction Runoff Controls:

1. Water Quality Buffer Zone - Enforcement

Continue to enforce the Water Quality Buffer Zone policy, adopted by the Smyrna Town Council in 2005, by posting it on the SWM Program website, informing prospective developers, and assessing all construction plans accordingly

2. Dry Detention Basin policy — Enforcement

Continue to enforce the Dry Detention Basin policy by contracting a professional engineer, an engineer of record, to ensure that all planned detention basins and devices adequately treat the first flush and detains runoff according to S. 4.2.5.2.1 of the newly issued MS4 permit through review and approval of storm water calculations prior to the construction project's pre-construction meeting as well as close inspection during its construction

3. Update Inventory/Inspections of Permanent Controls

Continue to enforce the Dry Detention Basin policy, adopted by the Smyrna Town Council in 2005, by keeping it posted on the SWM Program website, updating the existing detention basin and device inventory list, and annually inspecting -168 basins and devices. A Letter of Advisement is issued for non-compliant basins and devices causing a second inspection. If the site is still non-compliant even after the second issued Letter of Advisement and inspection the documented violations are given to the public works director for further enforcement actions. Once remediated, basins or devices issued a Letter of Advisement are also re-inspected six months later to ensure compliance before returning to the annual inspection schedule.

1. Develop and update MS4 Storm System Map

The Town will develop and continually update a Storm System Map indicating storm inputs such as inlets, catch basins, drop structures, headwalls, ditches, storm pipe, and detention basins. Each input will be populated with all available relevant information. All development projects going forward will be required to submit as-builts detailing this information to be added to the map.

2. Long-term Maintenance Agreement and Maintenance Plan

The Town will require Developers to create a long-term maintenance plan which details frequency and schedule of regular maintenance activities as detailed in the adopted Murfreesboro Stormwater Control Manual. This plan shall be included on the construction plans for the project. In association with the plan, the Developer must complete a legally binding Maintenance Agreement assigning maintenance responsibility to the owner/operator, a third party, or the permittee, henceforth known as the Owner. The Owner must record the Maintenance Agreement and Maintenance Plan with the Register of Deeds for the County of Rutherford, Tennessee. The Maintenance Agreement shall transfer between Owners of the property with the recorded plat for the property referencing the Instrument Number where the Maintenance Agreement and attachments are recorded.

4. Revise Ordinance and Codes to reflect changes in MS4 and General NPDES Construction Permit.

Revise all appropriate codes and policies to allow for the development of green infrastructure technologies as applied towards runoff reduction. Research and become knowledgeable of suitable green infrastructure technologies; modify existing codes and policies to allow for the use of these technologies then discuss these technologies with potential developers and design engineers in an effort to promote their use in as many future construction projects as possible.

VIII. POLLUTION PREVENTION / GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

PERMIT REQUIREMENTS

Section 4.2.6 of the Permit requires that the Town develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing runoff from municipal operations.

Section 4.2.6 of the Permit requires that the Town use training materials that are available from EPA, the State, or other organizations to provide employee training to prevent and reduce stormwater pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and stormwater system maintenance.

COMPLIANCE MECHANISMS

The Town has completed SWPPP for the all Town operated facilities. The Town will utilize the following BMPs to comply with the Permit requirements for Pollution Prevention / Good Housekeeping for Municipal Operations:

3. New Employee Orientation Educational Video

New employees to the Town will watch a brief educational video on reporting illicit discharges to the proper authorities and general good housekeeping tips geared towards preventing pollution.

4. Annual Educational Stormwater Training Video

All employees will view a short educational video on proper BMPs for their workplace and preventing and reporting illicit discharges they witness.

5. Parks Department/Golf Course

Strict adherence to environmentally safe pesticide/fertilizer application rates, frequency, and distance from stream is required, leaving water bodies unharmed. EPSC is always used when constructing any buildings.

6. Street Department

Ensure fabric is used beneath rock in repairs. EPSC is always used during land disturbance

7. Wastewater Treatment Plant

Semi-annual storm water inspections of six storm drain outlets, 34 curb storm drains, field gates, and tiles beneath roadways located throughout the facility. Cleanups are performed immediately when deemed necessary, after semi-annual inspections and when observed by staff.

Preventative measures, via standard operating procedures, are also used. These include immediately notify supervisors of any spills then run lab tests on collected samples if deemed necessary. Do not store barrels or containers close to storm drains. Don't park trucks near storm drains. Continual litter cleanup. Slow vac-truck dumping rate at headworks to avoid overflows. Annual EPSC classes held.

8. Water Treatment Plant

Ensure All chemicals are stored inside buildings with containment. Bulk chemicals at the raw water intake are stored inside a concrete and steel reinforced building, because it is remote and surrounded by Corps property used for moderate hunting activity. Training is required through certification programs

TOWN OF SMYRNA ENFORCEMENT RESPONSE PLAN

Introduction

The intent of this document is to provide guidance to town officials in enforcing the Stormwater Management Ordinance (SWM Ordinance). It should be used only as a guide, while recognizing that each situation is unique. The provisions of this enforcement response plan are not intended to limit the judgment and flexibility of the director in determining an appropriate response.

While the purpose is to provide guidance for administration of the SWM Ordinance, actual enforcement procedures should consider any unusual aspects of a violation or condition, as well as special characteristics of an enforcement action, in determining the proper response.

Minor infractions may be resolved by a verbal notice, telephone call, or warning letter advising the owner/operator/person of the nature of the violation. If such action fails to generate an adequate response by the owner/operator/person, further enforcement actions as provided by the ordinance may be taken. Regardless of the severity of the violation to the SWM Ordinance, the Stormwater Program will initiate a complaint investigation within seven (7) days of being notified of the violation. All enforcement responses, regardless of stringency, should be documented as soon as possible into the program's violation tracking table.

Enforcement Responses

Violations of the SWM Ordinance that may require Enforcement Responses, include, but are not limited to: grading permits, illicit discharges, detention ponds and devices, as well as free standing grease receptacles.

The order of precedence for enforcement responses outlined in this guide should not be construed to prevent the director from taking a stronger action without first implementing less stringent steps, if in their opinion, a more forceful response is necessary.

A show cause hearing should be held prior to any enforcement action other than a telephone call, warning letter, notice of violation (NOV), or stop work order. The purpose of a show cause hearing is to provide a forum for the owner to present a defense to charges as outlined, or, to obtain additional information.

Documented Phone Calls or Informal Discussions

In the case of the most minor violation of a permit or the ordinance, a telephone call or informal meeting may be sufficient to obtain the desired compliance. Phone calls should be documented into the program's violation tracking table. Likewise, if an informal discussion is held, it should be entered onto the Stormwater Program's violation tracking table.

Withholding of Plan Approval or Other Authorizations

The Stormwater Program retains the ability to withhold plan approval and CO sign-off for a project until observed Stormwater violations are resolved. The Stormwater Program can also enforce holds on specific lots within a larger site.

Warning Letter

A warning letter is the lowest level of formal response to a violation. It is intended for minor violations which would not cause harm to the environment.

Notice of Violation

A NOV is an official notification to inform a non-compliant owner of a violation of the SWM Ordinance. Within ten (10) days of receipt of this notice, a written explanation of the violation and a plan for the satisfactory correction and prevention thereof, to include specific required actions, shall be submitted by the owner to the director. Inspection to ensure performance of any corrective actions may be conducted by the director at their discretion. Submission of this plan in no way relieves the owner of liability for any violations occurring before or after receipt of the NOV.

revised 9/1/2020

Enforcement Response Plan (revised 9/1/2020)

Stop Work Order

A Stop Work Order may be issued when the director finds that an owner has violated, or continues to violate, the SWM Ordinance or order issued thereunder. The order shall require that the owner:

- (a) Comply forthwith; and
- (b) Take such appropriate remedial or preventive action as may be needed or deemed necessary to properly address a continuing or threatened violation, including halting operations and terminating the discharge.

Administrative Orders

Administrative orders (AO) are enforcement documents which direct owners to perform, or to cease, specific activities. AOs may also invoke a penalty. There are three (3) primary types of AOs: consent orders; compliance orders; and cease and desist orders.

Consent orders are entered into between the town and the owner to assure compliance as to specific actions to be taken by the owner to correct non-compliance within a specified time period. The director may enter into consent orders, assurances of voluntary compliance or other similar documents establishing an agreement with any owner responsible for noncompliance. Such documents shall include specific action to be taken by the owner to correct the noncompliance within a time period specified in the document. Such documents shall have the same force and effect as orders issued pursuant to Section 14-610.

Compliance orders may be issued when the director finds that an owner has violated, or continues to violate, the ordinance or an order issued thereunder. It is similar to a consent order except that the consent of the owner is not implied in its issuance. When the director finds that an owner has violated or continues to violate and section of this article, or a permit or order issued under this article, the director may issue an order to the owner responsible for the violation directing that the owner come into compliance within a specified time, and such order may include assessment of a penalty to be paid if the owner does not come into compliance within the time provided. Compliance orders also may contain other requirements to address the noncompliance, including additional self-monitoring and management practices designed to minimize the amount of pollutants discharged offsite. A compliance order does not relieve the owner of liability for any violation, including any continuing violation. Issuance of a compliance order shall not be a bar against or a prerequisite for taking any other action against the owner.

Cease and desist orders may be issued when the director finds that an owner has violated, or continues to violate, the SWM Ordinance or order issued thereunder. Issuance of a cease and desist order shall not be a bar against or a prerequisite for taking any other action against the owner.

AOs contain the following components:

1. Title - The title specifies the type of order being issued (see below), to whom it is being issued, summarizes the purpose of the order, and contains an identification number.
2. Legal Authority - The authority under which the order is issued (SWM Ordinance).

Enforcement Response Plan (revised 9/1/2020)

3. The Finding of Noncompliance - All violations must be described including the dates, the specific permit and/or ordinance provisions violated, and any damages known and attributable to the violation.
4. Required Activity - All orders should specify the required actions, such as installation of BMPs, additional inspections, appearance at show cause hearings, etc.
5. Milestone Dates for Corrective Actions - When compliance schedules are appropriate, all milestone dates must be established including due dates for required written reports.
6. Supplemental Clauses - The document should contain standard clauses providing that:
 - (a) Compliance with the terms and conditions of the administrative order shall not be construed to relieve the owner of its obligation to comply with applicable state, federal or local law, or the permit;
 - (b) Violation of the administrative order itself may subject the owner to additional penalties as set out in the SWM Ordinance;
 - (c) No provision of the order shall be construed to limit the town's authority to issue supplementary or additional orders, or to take action deemed necessary to implement this program or ordinance;
 - (d) The order shall be binding upon the owner, its officers, directors, agents, employees, successors, assigns, and all persons, firms or corporations acting under, through or on behalf of the owner.

Administrative orders (AO) issued as a result of a violation of the SWM Ordinance may contain a penalty pursuant to Section 14-611 of the SWM Ordinance. AOs may also be used to advise an owner of the need to take, or cease, certain actions, and in such case, may or may not be associated with penalties as defined in the ordinance or in this guide.

Civil Litigation

Pursuant to Section 14-611 of the SWM Ordinance, the director may, through the town attorney, petition the appropriate court(s) for issuance of preliminary or permanent injunctions to restrain or compel activities by an owner.

Penalties, Administrative or Civil

The SWM Ordinance authorizes assessment of penalties not to exceed \$5,000 per violation per day. Additionally, Section 14-611 of the ordinance authorizes the director to assess a civil penalty for actual damages incurred by the town. Before assessment of any administrative penalty, a show cause hearing must be held with the non-compliant owner.

If a violation results in conditions requiring the expenditure of public funds for mitigation of damages, a penalty shall be assessed in such amount as to offset the public funds so expended. This will in no way reduce or offset the liability of the owner with respect to damages incurred.

Cease and Desist Order

A civil injunction may be requested at any time, for any violation, if in the opinion of the director in consultation with the town attorney, such action is justified, needed or appropriate.

Enforcement Response Plan (revised 9/1/2020)

Criminal Action

In cases where criminal acts are suspected by the director, after consultation with the town attorney, information shall be gathered and forwarded to the district attorney of the appropriate county for action. Criminal prosecution, if pursued, shall be in addition to other actions authorized by ordinance.

TABLE A
ENFORCEMENT RESPONSE GUIDE
ESCALATION OF RESPONSES

The following table outlines a recommended course of action for violations of the SWM Ordinance. When enforcement actions involving a specific site, a common operator or owner include multiple or successive violations then the severity level may be increased. TDEC may also be consulted for violations that have not been satisfactorily addressed by the owner.

While the purpose is to provide guidance for administration of the SWM Ordinance, it is not intended to limit the judgment and flexibility of the director in determining an appropriate response.

<u>SEVERITY OF VIOLATION</u>	<u>ACTION</u>
1	Informal Phone Call/Discussion
2	Written warning
3	Notice of Violation
4	Stop Work Order
4	Administrative Order
5	Administrative Order with up to \$500 Penalty
6	Administrative Order with up to \$1000 Penalty
7	Administrative Order with up to \$2000 Penalty
8	Administrative Order with up to \$3000 Penalty
9	Administrative Order with up to \$5000 Penalty

**TOWN OF SMYRNA:
PUBLIC INFORMATION AND EDUCATION (P.I.E.) PROGRAM**

(Revised on 8-31-20)

OPENING STATEMENT:

In addition to monthly sweeping of many of the main thoroughfares in Smyrna, our citizens do a great deal of volunteer work to reduce the litter load of our streams. Thanks to the town's public participation-driven quarterly Adopt-A-Highway (state) and Adopt-A-Roadway (town) events, plus the spring and fall Stream Cleanup (public) events and fall Adopt-A-Stream (school) events the litter loading of our streams has appeared to diminish as observed during our periodic stream assessments. With this said, it appears that these efforts were an effective means of improving local stream water quality and habitat over the course of the past fifteen (15) plus years.

	GOALS [Frequency]	TARGETED AUDIENCE [Age]	METHODS OF ASSISTANCE	EXPECTATIONS
	ON-GOING PROJECTS			
1.	Develop a Public Information and Education (PIE) program that details specific goals and audiences as well as year-round events. This shall also include targeting of specific pollution from known sources such as identified Hot Spots. [Implement year-round, while evaluating annually]	The targeted audience would be all citizens regardless if they own residents, businesses or industries, and are teachers or students. [All ages]	All goals will be listed along with the targeted audience and how the MS4 expects the citizens to respond.	A heightened awareness of the need for cleaner water and the stewardship needed to obtain it.
2.	Track and maintain records of public information/education and outreach efforts then include them in the Annual Report to TDEC. [Year-round]	The targeted audience would be all citizens regardless if they own residents, businesses or industries, and are teachers or students. [All ages]	All events are tracked on a standard table that includes dates, number of participants, and number of standard educational packets distributed.	Records of events are expected to indicate the amount of effort and the number of citizens contacted.
3.	At the time of the year when the Annual Report to TDEC is written, the effectiveness of all on-going public information and education efforts shall be assessed. The SWM Program staff should assess this then present its findings to the director.	The targeted audience would be all citizens regardless if they own residents, businesses or industries, and are teachers or students. [All ages]	If an ongoing public information and education effort is no longer effective ways should be found to increase its effectiveness or the effort should be eliminated.	The number of citizens, regardless of age, should continue to remain on status quo or hopefully, increase from one year to the next.
4.	Develop then implement a method of advertising all public involvement and participation efforts. [Year-round]	The targeted audience would be all citizens. [All ages]	Announce on Smyrna's website and Channel 3, in local newspapers, on utility bills, and at SWAC meetings.	Citizens will become more involved in Smyrna sponsored public participation events.
5.	Continue to fund, assist, and assess a contractual effort between Rutherford County and the four other MS4 entities to implement the Project WET program within County and City of Murfreesboro schools as well as private schools. [Year-round]	The targeted audience would be students in all grades. [School age]	A Discovery Center educator trains teachers how to teach water quality issues to their students, while providing the needed classroom and stream monitoring supplies. School principals are kept apprised.	Students will understand that everyday activities are dependent upon clean water, thus they will adopt appropriate steps to change their habits in favor of cleaner water.
6	Contractually broadcast radio PSAs @ water quality	Targeted audience of all ages.	EZ reasoning for clean water.	Life is dependent on clean water.
7	Maintain a standard educational packet, comprised of ~24 informative brochures. [Year-round]	The targeted audience would be all citizens. [All ages]	Distribute to citizens during events, i.e. stream and shoreline cleanups, storm drain decal, and tree planting events, Boat Days-WaterFests, GSA Twilight Camps and Public Land Days	Citizens will understand that everyday activities are dependent upon clean water, thus will adopt appropriate steps to change their habits in favor of cleaner water.

P 2	GOALS [Frequency]	TARGETED AUDIENCE [Age]	METHODS OF ASSISTANCE	EXPECTATIONS
8.	Periodically, update the SWM Program website. [Year-round]	The targeted audience would be all citizens. [All ages]	Include definitions and official stormwater documents in a readily accessible and understandable format, adding new PSAs and links.	Citizens will understand the importance of water quality and will adopt appropriate steps to change their habits in favor of cleaner water.
9	Contractually Twitter PSAs @ water quality	Targeted audience of all ages.	EZ reasoning for clean water.	Life is dependent on clean water.
10.	Provide educational training on Illicit Discharge Detection and Elimination to all employees in the form of an educational video shown during New Employee Orientation.	new employees to the Town of Smyrna.	Integrated into New Employee Orientation program	More Illicit Discharges will be reported to the Stormwater Division by Town Employees
11.	Revise existing Site Inspection Requirements document to reflect recent permit changes made by TDEC then distribute by email as needed.	The targeted audience would be all design engineers, developers, contractors, and homebuilders.	The one page Site Inspection Requirements document includes all permit changes initiated by TDEC.	Plans will be designed to most recent permit requirements to enable better operator compliance.
12.	Facilitate training workshops, where Smyrna staff is reminded of the importance of water quality impacts from their daily operations as well as how they are to identify and report all IDDEs. [Annually]	All Smyrna staff handling chemicals or disturbing earth; Codes, Street, Parks, Utilities, Golf Course, and Building and Grounds departments.	Facilitate local workshops/luncheons where guest speakers present very informative and applicable information.	All Smyrna staff will continue to prevent chemical and sediment pollution to surface and groundwater resources.
13.	Distribute, at all outreach events Informational pamphlets and brochures detailing facts about water quality and good housekeeping tips to prevent littering and pollution [Year-round]	The targeted audience would be all citizens. [All ages]	This half brochure - half map does a splendid job of defining the major water quality issues and listing the professional contacts in the Stones River watershed.	Citizens will understand that everyday activities are dependent upon clean water, thus will adopt appropriate steps to change their habits in favor of cleaner water.
14.	Co-facilitate, with the citizen-driven Stones River Watershed Association, the annual Boat Day and WaterFestat U.S. Army Corps of Engineers lakefront property. [Annually in the early summer]	The targeted audience would be all citizens. [All ages]	Citizenry canoe/kayak, while learning about water quality issues from a multitude of governmental departments and outside third parties. Smyrna distributes its standard educational packets.	Citizens will understand that fun boating is dependent upon clean water, thus will take appropriate steps to change their habits in favor of cleaner water.
15.	Maintain double-sided educational kiosks within the town's park system, using grant funds to purchase supplies and Smyrna staff for construction and installation.. [Year-round]	The targeted audience would be all citizens. [All ages]	Explain water quality issues to the citizenry of Smyrna in easy to understand text and straight forward illustrations.	Citizens will understand that fun boating is dependent upon clean water, thus will take appropriate steps to change their habits in favor of cleaner water.
16.	Recognize businesses and commercial properties who have gone above and beyond in water quality. [BIANNUAL]	Commercial Community	The chosen business will be awarded a certificate and promoted on the Town's social media pages	Town recognition and promotion of businesses will promote other businesses to adopt positive actions.
17.	Meet with developers and engineers during the planning phase of new developments to discuss and educate them on site-specific details regarding water flow and appropriate EPSC measures. Evaluated through number of attendees and pre-construction meetings.	Engineering and Development Communities	Offered to all developers considering work in the Town of Smyrna	Developers and Engineers will develop a deeper understanding of Stormwater management, EPSC importance, and water quality

	[YEAR ROUND]			
18.	Implement a mandatory stormwater control and EPSC measure informational video for a Developer to view prior to issuance of a Grading Permit.	Engineering and Development Communities	Required participation for any individual wishing to obtain a Grading Permit	Developers and engineers will obtain a brief overview of proper SCM selection and the importance of regular maintenance
P 3	GOALS [Frequency]	TARGETED AUDIENCE [Age]	METHODS OF ASSISTANCE	EXPECTATIONS
19.	Create then broadcast a video of a stream paddle trip filmed on Stewart Creek, where water quality impacts and boat safety are highlighted. [Spring and summer].	The targeted audience would be all citizens old enough to safely paddle. [All ages]	Emphasize water quality issues and paddling safety, while showing actual filmed footage covering ~3 miles of Stewart Creek.	Citizens will realize the beauty and serenity of Stewart Creek then understand the need to change their habits in favor of cleaner water.
20.	Advertise on Channel 3 all Household Hazardous Waste Collection Days and the TV and computer collection site. [Dependent upon TDEC, Year-round]	The targeted audience would be all citizens, especially adults. [All ages]	Clearly explain what can be recycled as well as where and when this can be done in Rutherford County.	All citizens will cease disposing of hazardous waste and recyclable computers into our landfills.
21.	Write and submit articles to Channel 3, the SWM website, and the local newspaper highlighting the importance of public participation events, such as stream cleanups, tree plantings, and storm drain decal events, plus what citizens can do [Year-round]	The targeted audience would be all citizens. [All ages]	Explain water quality issues to the citizenry of Smyrna in easy to understand text and straight forward illustrations.	Citizens will understand that everyday activities are dependent upon clean water, thus will adopt appropriate steps to change their habits in favor of cleaner water.
22.	Broadcast on Channel 3 Cedar Grove Elementary's Project WET stream monitoring event on Rocky Fork Branch. DISCONTINUED, TEACHER LEFT TEACHING [Late Spring]	The targeted audience would be elementary school students and their parents and siblings. [All ages]	Actual footage showing local 5 th graders noting physical conditions and gathering chemical and biological samples in Rocky Fork Branch.	Students will understand that everyday activities are dependent upon clean water, thus will adopt appropriate steps to change their habits in favor of cleaner water.
23.				
24.	Maintain 25 'No Littering, Drains to Lake' and legal penalty signs posted in parks and along greenways. [Year-round]	The targeted audience would be all citizens. [All ages]	Citizens notice and read these signs along our waterways.	Citizens will learn how litter harms our environment, thus will cease littering, regardless of where.
25.	Maintain stream crossing signals along major highways and well-traveled thoroughfares. [Year-round]	The targeted audience would be all citizens. [All ages]	Stream name signs are posted at stream crossings of major roads. Paired signs face opposing directions so all motorists can see them.	Citizens will understand that there is a stream near where they live and work. They will take stewardship in the well-being of that stream.
P 4	GOALS [Frequency]	TARGETED AUDIENCE [Age]	METHODS OF ASSISTANCE	EXPECTATIONS
28.				
29.	Contractually broadcast radio PSAs @ water quality	Targeted audience of all ages.	EZ reasoning for clean water.	Life is dependent on clean water.
30.	Develop a mechanism for informing the public of new construction projects and provide a means for citizens to report violations. [Year-round]	The targeted audience would be all citizens, probably middle school age and older. [Middle school and older]	Drop-downs on the SWM Program website.	Citizens will call the SWM Program when they observe a construction violation. This should expedite the SWM Program's response.
31.	Create an informative 'Hot Spots' brochure then mail it to owners of the more significant properties classified as 'Hot Spots'. [Year-round]	Owners and operators of properties classified as 'Hot Spots'. [Adults]	Provide guidance to these owners and operators through this brochure and follow-up discussions that will explain the need to control	Owners and operators should take heed of this guidance and attempt to control the amount of pollutants leaving their property in runoff.

			pollutants that runoff from large parking lots, restaurants and schools with free-standing grease receptacles, and oil/repair facilities.	Large parking lots without detention; Restaurants and schools with free-standing grease receptacles; auto retail; oil/repair facilities; body shops.
32.	Post and maintain watershed divide signs along major highways and well-travelled thoroughfares. [Year-round]	The targeted audience would be all citizens. [All ages]	Divide signs will be posted as funds permit. Paired signs face opposing directions so all motorists can see them.	Citizens will understand that there is a stream near where they live and work. They will take stewardship in the well-being of that stream.
33.	Contractually broadcast several water quality PSAs, via Twitter, television, radio, or whatever the prevailing media is at that time. [Year-round]	The targeted audience would be all citizens. [All ages]	Explain water quality issues to the citizenry of Smyrna in easy to understand dialogue and straight forward illustrations.	Citizens will understand that fun boating is dependent upon clean water, thus will take appropriate steps to change their habits in favor of cleaner water.

TOWN OF SMYRNA

Water Quality Buffer Zone Policy

Section I - Description

A water quality buffer zone (a.k.a. a riparian zone) is a strip of undisturbed native (indigenous) vegetation, either original or re-established, that borders streams and rivers, ponds and lakes, wetlands, and seeps. Water quality buffers zones, a.k.a. buffer zones, are most effective when storm water runoff is flowing into and through them as shallow sheet flow, rather than in concentrated form such as in channels, gullies, splays, or wet weather conveyances. Therefore, it is critical that the design of any development include management practices, to the maximum extent practical, that will result in storm water runoff flowing into and through the buffer zone as shallow sheet flow.

Water quality buffer zones protect the physical and ecological integrity of water bodies from surrounding upland activities in the following ways:

- filtering excess amounts of sediment, organic material, nutrients, and other chemicals;
- reducing storm runoff velocities;
- providing flood protection;
- protecting channel bank areas from scour and erosion;
- providing shade for cooling adjacent water; which allows waters to hold a greater level of dissolved oxygen;
- providing leaf litter and large woody debris important to aquatic organisms; and
- improving stream bank habitat for aquatic organisms

Section II – Intent

The intent of this policy is to protect and maintain the native vegetation in water quality buffer zones by implementing specifications for the establishment, protection, and long-term maintenance of buffer zones along all intermittent and perennial stream waterways, wetlands, and seeps, in or adjacent to new development and significant redevelopment within our jurisdictional authority. This policy serves to clarify the requirements for water quality buffer zones. It applies to all development approved after its enactment, including significant redevelopment of properties approved prior to its enactment.

Section III - Design Standards for Water Quality Buffer Zones

A water quality buffer zone is required along all perennial and intermittent stream waterways and wetlands as identified on a 7.5-minute USGS quadrangle map, or as determined by the Tennessee Department of Environment and Conservation (TDEC) or Town of Smyrna Engineering Department. The buffer zone width shall be determined as follows:

Where a subdivision is traversed by a watercourse, drainageway, channel, or stream, there shall be provided a water quality buffer zone. Streams or other waters with drainage areas less than 1 square mile will require buffer widths of 30 feet minimum. Streams or other waters with drainage areas between 1 and up to 2 square miles will require buffer widths of 45 feet minimum. Streams or other waters with drainage areas greater than 2 square miles will require buffer widths of 60 feet minimum measured from each top of bank of said channel. **Additionally, if a stream is classified as impaired by the State of Tennessee, or is a direct tributary to an impaired stream, the buffer zone must be a minimum of 60 feet.** This buffer zone shall be required unless a licensed engineer demonstrates to the satisfaction of the city engineer that a lesser buffer zone is required using an alternative best management practice equaling or exceeding the effectiveness of the required buffer zone.

Goes above TDEC minimum requirement, mimics Murfreesboro's decision.

Water quality buffer zone width adjustment:

- A) If there are 15% to 24% slopes which are within the required buffer zone width, the buffer width shall be adjusted to include an additional 20 feet.
- B) If there are 25% or greater slopes which are within the required buffer zone width, the buffer width shall be adjusted to include an additional 50 feet.
- C) If the adjacent land use involves drainfields from on-site sewage disposal and treatment systems (i.e. STEP system collection / sand filter treatment / disposal field lines) or subsurface sewage disposal systems (i.e. conventional, alternative, and experimental septic systems) current TDEC-Division of Water Pollution Control and Rutherford County Health Department regulations, requiring a 25 foot setback from top of bank, shall govern. No septic tanks shall be allowed within the buffer zone, while disposal field lines are allowed within the buffer zone so long as they abide by the aforementioned state and county regulations.
- D) If the land use or activity involves the storage of hazardous substances or petroleum facilities, the buffer zone width shall be adjusted to include an additional 100 feet.
- E) If the land use involves animal feedlot operations, the buffer zone width shall be adjusted to include an additional 200 feet.
- F) If the land use or activity involves solid waste landfills or junkyards, the buffer zone width shall be adjusted to include an additional 250 feet.
- G) If the adjacent land use involves surface discharges of collected septage current Rutherford County Health Department regulations, requiring a 300 foot setback from the top of bank, shall govern.
- H) If the adjacent land use involves surface discharges from a wastewater treatment plant, land application of bio-solids, or animal waste the buffer zone width shall be governed by current TDEC-Division of Water Pollution Control regulations.
- I) If more than one of the aforementioned are applicable, the greater width adjustment shall apply.

Section IV - Water Quality Buffer Zone Management and Maintenance

The function of the water quality buffer zone is to protect the physical and ecological integrity of the waterway, to reduce flooding potential, and to filter runoff from residential, commercial, institutional, recreational, and industrial development. The buffer zone vegetative objective is undisturbed native vegetation.

- A) Management of the water quality buffer zone includes specific limitations on alteration of the natural conditions. The following practices and activities are restricted within the water quality buffer zone, except with prior approval by the Town of Smyrna Engineering Department:
 - 1) Clearing or grubbing of existing vegetation;
 - 2) Clearcutting of vegetation;
 - 3) Soil disturbance by grading, stripping, or other practices;
 - 4) Filling or dumping;
 - 5) Use, storage, or application of pesticides, herbicides, and fertilizers; and
 - 6) Conversion of vegetation from native to exotic species.

- B) The following structures, practices, and activities are permitted in the water quality buffer zone, subject to the prior approval of the Town of Smyrna Engineering Department, the acquisition of an Aquatic Resources Alteration Permit (ARAP) from the Natural Resources Section, Division of Water Pollution Control, TDEC, and the following specific design or maintenance features:
- 1) Stream crossings, paths (i.e. trails and greenways), stream bank stabilization efforts, riparian zone enhancements, instream deflector structures, and utilities
 - a) An analysis needs to be conducted to ensure that no economically feasible alternative is available;
 - b) The right of way should be the minimum width needed to allow for maintenance access and installation;
 - c) The angle of a crossing shall be perpendicular to the stream or buffer in order to minimize clearing requirements;
 - d) The minimum number of crossings should be used within each development, and no more than one crossing is allowed for every 1,000 linear feet of buffer zone. Where possible, the design of roadways and lots within a development should be aligned such that all streams are either to the rear or the side of individual lots, never along the front.
 - 2) Individual trees within the water quality buffer zone may be cut down if in danger of falling, causing damage to dwellings or other structures, or causing blockage of the stream. The remaining root wad or stump should be left in place, where feasible, to maintain soil stability and instream habitat.
- C) All site development plans and plats prepared for recording shall:
- 1) Show the extent of any water quality buffer zone on the subject property by metes and bounds and be labeled as "Water Quality Buffer Zone";
 - 0) Provide a note to reference any water quality buffer zone stating, "There shall be no clearing, grading, construction, or disturbance of soil and/or native vegetation except as permitted by the Town of Smyrna Engineering Department"; and
 - 2) Provide a note to reference any protective covenants governing all water quality buffer zones stating, "Any water quality buffer zone shown hereon is subject to protective covenants which may be found in the land records and which restrict disturbance and use of these areas."
- D) All water quality buffer zones must be protected during development activities. Prior to the initiation of development activities, ensure adequate visibility of the water quality buffer zones by staking and flagging and onsite visitation and discussion(s) with all appropriate contractors. Permanent boundary markers, in the form of signage approved by the Town of Smyrna Engineering Department, shall be installed prior to the completion of the development activities.

- E) Stream banks and other areas within the water quality buffer zone shall be left in a stabilized condition upon completion of the development activities. The vegetative condition of the entire buffer zone shall be monitored and landscaping or stabilization performed to repair erosion, damaged vegetation, or other problems identified. Only native vegetation may be used in conjunction with stabilization activities. A guide to selecting native vegetation can be found at www.tva.com/river/landandshore/stabilization/plantsearch.htm, or obtained by contacting the Town of Smyrna Engineering Department.

All landscaping or stabilization activities within the water quality buffer zone shall have prior approval by the Town of Smyrna Engineering Department. In addition, performing work in and around waters of the state may require coverage under a state and possibly a federal permit. Contact the nearest TDEC, Division of Water Pollution Control Environmental Assistance Center (1-888-891-8332) for more information on whether a proposed activity requires a permit.

- F) No buildings shall be allowed in the water quality buffer zone with the exception of open type recreation areas as detailed in the Town of Smyrna Municipal Zoning Ordinance.
- G) All water quality buffer zones shall be maintained through a declaration of protective covenant, which is required to be submitted for approval by the Town of Smyrna Engineering Department. The covenant shall be recorded in the land records and shall run with the land and continue in perpetuity.
- H) Water quality buffer zones shall be recorded on the plat for parcels subject to plat revision as water quality buffer easements. On parcels not subject to plat revisions, the buffer zone shall be applied as a setback from the edge of channel and shown on the site plan as a water quality buffer zone.
-) All lease agreements shall contain a notation regarding the presence and location of protective covenants for water quality buffer zones. The aforementioned agreement shall contain information on the management and maintenance requirements for the buffer zones for the new resident.

Section V - Waivers/Variances

- A) This water quality buffer zone policy shall apply to all proposed development except for a development which was approved prior to the effective date of this ordinance:
- 1) Is covered by a valid, unexpired plat in accordance with development regulations;
 - 2) Is covered by a current, executed public works agreement;
 - 3) Is covered by a valid, unexpired building permit; or
 - 4) Has been granted a waiver in accordance with current development regulations.

- B) The Town of Smyrna Engineering Department may grant a variance for the following:
- 1) Those projects or activities where it can be demonstrated that strict compliance with the ordinance would result in practical difficulty or financial hardship; or
 - 2) Those projects or activities serving a public need where no feasible alternative is available; or
 - 3) The repair and maintenance of public improvements where avoidance and minimization of adverse impacts to wetlands and associated aquatic ecosystems have been addressed.
- C) Waivers for development may also be granted in two additional forms, if deemed appropriate by the Town of Smyrna Engineering Department:
- 1) The water quality buffer zone width may be relaxed and permitted to become narrower at some points as long as the width is not reduced to less than (35) feet perpendicular from the top of bank, and the overall average width of the buffer zone meets the minimum requirement set forth in Section III – Water Quality Buffer Zone Width Determination (page 1) of this policy.
 - 2) The Town of Smyrna may consider credit for additional density elsewhere on the site in compensation for the loss of developable land due to the requirements of this ordinance. This compensation may increase the total number of dwelling units on the site up to the amount permitted under the base zoning.
- D) The applicant shall submit a written request for a variance to the Town of Smyrna Engineering Department. The application shall include specific reasons justifying the variance and any other information necessary to evaluate the proposed variance request. The Town of Smyrna Engineering Department may require an alternatives analysis that clearly demonstrates that no other feasible alternatives exist and that minimal impact will occur as a result of the project or development.
- E) When considering a request for a variance, the Town of Smyrna Engineering Department may require additional information such as, but not limited too, site design, landscape planting, fencing, the placement of signs, and the establishment of water quality best management practices in order to reduce adverse impacts on water quality, streams, and wetlands.

Section VI - Conflict with Other Regulations

Where the standards and management requirements of this buffer ordinance are in conflict with other laws, regulations, and policies regarding streams, steep slopes, erodible soils, wetlands, floodplains, timber harvesting, land disturbance activities, or other environmental protective measures, the more restrictive requirements shall apply.

MINUTES OF THE TOWN OF SMYRNA STORM WATER ADVISORY COMMITTEE

April 15, 2024

1st Item: Call to Order

The April meeting of the Town of Smyrna Storm Water Advisory Committee was held on Monday, April 15, 2024. Chairman, Rhett Kimble, called the meeting to order at 5:00 P.M. at Town Hall, Smyrna, Tennessee.

The following Storm Water Advisory Committee members and staff were present:

Members:

Bradley Heilwagen
Douglas Brown
Tyler Short
Natashia Floyd
Rhett Kimble
Andre Eckemrode
William Shackelford

Staff:

Benjamin Groce, Staff Attorney
Charles King
Bradly Jordan
Patrick Owen
Tammie Mitchell
Tammy Rankin
Tom Rose

2nd Item: Acknowledgement of "Adopt-A-Stream" Volunteers and Trophies

Bradly Jordan presented trophies and spoke about the program.

3rd Item: Acknowledgement of "Adopt-A-Roadway"

Tammie Mitchell and Tammy Rankin presented certificates and spoke about those who have participated in cleaning our roadways.

4th Item: Distribution of Certificates to SWAC Members

5th Item: Introduction of New SWAC Members

6th Item: Election of Officers

Rhett Kimble was nominated by Douglas Brown for Chairman and received unanimous votes. Douglas Brown was nominated by Rhett Kimble for Vice Chairman and received unanimous votes.

7th Item: Citizen Comments

Rhett Kimble asked if there were any citizen comments to be heard. There were none so the Committee proceeded to #8 on the agenda.

8th Item: Approval of Minutes of the January 29, 2024 Meeting

The Committee considered a motion by Bradley Heilwagen to approve the minutes of the January 29, 2024 meeting presented. The motion was seconded by Natashia Floyd. The motion was approved unanimously. A copy of the minutes as approved is attached hereto and marked Exhibit "1".

9th Item: Old Business

There was no old business to discuss at this meeting.

10th Item: New Business

A. Consent/Correction Agenda

- 1. Vacant and inactive account list.

The Stormwater Fee Vacant Account List (through 3/31/24) was presented by staff. There are no accounts on the list for this period. A copy of the Stormwater Fee Vacant Account List (through 3/31/24) is attached and marked as Exhibit "2".

There was no motion by the Committee to approve the Vacant/Inactive List.

B. Adjustment Applications

There were no adjustment applications to consider at this meeting.

C. Credit Applications

There were no credit applications to consider at this meeting.

11th Item: Reports of Officers, Committees, or Staff

- A. Mr. Bradly Jordan reported to the Committee that since last meeting on 1/29/24 that one citizen called/inquired about the Storm Water User Fee.
- B. Mr. Bradly Jordan presented the Storm Water Management Program Quarterly Progress Report. This report was for the period of January 1, 2024 to 3/31/2024. Quarterly Progress Report is attached hereto and marked as Exhibit "3".
- C. Announcement of 16th Annual Boat Day on June 22, 2024. Murfreesboro and Smyrna are joining together to combine efforts for greater outreach.
- D. Mr. Bradly Jordan introduced the new Environmental Technician, Patrick Owen.

12th Item: Adjournment

There being no further business, to come before the committee a motion was made by Douglas Brown to adjourn the meeting and seconded by Natasha Floyd. Without objection, the meeting was adjourned at 5:23 PM.

Submitted by:

Bradly Jordan, Secretary Date

Rhett Kimble, Chairman or Date
Douglas Brown, Vice Chairman